

Intermediate Level Discipline-Based Models

Arts and Humanities

Intermediate Level Arts and Humanities

Course Overview:

Arts and humanities includes the disciplines of dance, drama/theatre, music, and visual arts. While studying arts and humanities, students learn to express themselves and communicate through the arts. Additionally, they gain an awareness of the creative potential of each arts discipline. Students work independently and with others in creating, performing, and responding. As students study each discipline, they begin to develop an appreciation of their own culture, cultures of others, and how place and time have influenced artistic expression. Although the various arts disciplines have unique qualities, students learn that the disciplines share many properties and connect with almost all other subjects in the curriculum. Arts specialists and generalists work together to provide instruction that allows students to acquire the necessary knowledge and skills for participating in, responding to, and appreciating the arts.

In dance, students study dance elements, movements, and forms. They recognize and understand that dance provides unique and valuable insights into the culture or period from which it comes. As students study music, they understand how the elements combine to express ideas, thoughts, and feelings and that culture, purpose, and history influence the way ideas are expressed. A study of drama/theatre enables students to understand the elements of the discipline and to reach beyond their individual world to other cultures, periods, and styles. A study of visual arts provide opportunities for students to learn elements of art, principles of design, and media and processes used to create their own works of arts and study the works of others.

Specialists and generalists collaborate to deliver content outlined in the *Program of Studies*. Specialists have primary responsibility for teaching about specific arts disciplines. Generalists align and integrate the arts across the curriculum. If specialists are not available, then the school must decide who has the primary responsibility for teaching the content of those disciplines. Artists, artist in residence, professional arts organizations, and university personnel may also assist in presenting content. District arts coordinators and/or resource people, may provide support for both specialists and generalists and may assist in coordinating outside resources.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students. Sample activities in this model are designed by discipline and can be blended in a variety of ways.

Intermediate Level Arts and Humanities

Guiding Questions:

- How do I use the elements of each arts discipline to create and perform?
- How do I use the arts to express my ideas and feelings?
- How do the arts reflect cultures, periods, and styles?
- What are the purposes of arts?
- How do artists create and/or perform?

Grade 4 Dance

Academic Expectations	Guiding Questions	Correlation to the Program of Studies
<p>Dance (1.15)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How do I use the elements of dance to create and perform?</p> <p>How do dancers and choreographers create and/or perform?</p> <p>How do I use dance to express my ideas and feelings?</p>	<p>Students will</p> <ul style="list-style-type: none"> • demonstrate the ability to perform a dance alone, with a partner, and in a small group using three elements of movement (space, time, force). • create simple dances with a beginning, middle, and end using a combination of locomotor (walk, run, hop, jump, leap, skip, slide, gallop) and nonlocomotor (e.g., bend, stretch, twist, swing) movements. • create movement sequences that include repetition and variety using different locomotor and nonlocomotor movements. • demonstrate the ability to recognize the relationship between the elements of dance and the expressive qualities of movement (e.g., ideas, emotions). • describe elements of dance and explain how dance differs from other physical movements. • create a movement sequence using the elements of dance.

Grade 4 Dance

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • select three action words from given lists. In small groups, decide on movements for each word, making action sentences that connect the three movements. Perform movements for the class who will identify action words being demonstrated. • perform and create simple dances in variety of groupings (e.g., alone, with partners, in small groups) that repeat and vary elements of movement (e.g., make changes in time, space, and force/energy). Videotape compositions for peer review. • use movement lines to communicate feelings. Create start shapes, action along lines, and end shapes. Observe and discuss meaning of dance movements created by fellow students, focusing on movement structure and form. • create movement sequences exploring various ways to combine locomotor and nonlocomotor movements. Create scoring guides for critiquing own work and work of others. • keep daily journals of feelings, observations, and dreams. Select journal entries and translate feelings into movement phrases. Join other students in “quilting” phrases together. Videotape performances and evaluate effectiveness in demonstrating feelings. • create living dance stories. Translate actions in the plot into movement words, adding time, force, and space elements. Develop dance stories with a clear beginning, middle, and end. • view peers’ dances to compare how dance phrases differ from everyday gestures and movements. Explain in learning logs the differences between dances and gestures and movements. 	<p>After an open-ended activity on movement, five fourth graders and three fifth graders with exceptional ability are grouped together to work with an artist in residence to create an original dance to be performed as part of the arts festival. <i>(Types of extensions: purpose and appropriateness, order of learning, level of support, resources and materials, routines and procedures, environment, demonstration of knowledge).</i></p>

Grade 4 Dance

Academic Expectations	Guiding Questions	Correlation to the Program of Studies
<p>Dance (1.15)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How does dance reflect cultures, periods, and styles?</p> <p>What are the purposes of dance?</p>	<p>Students will</p> <ul style="list-style-type: none"> • participate in dance activities by performing traditional folk dances, square dances, and ethnic dances (e.g., Native American, African-American). • discuss elements of dance performances seen in various media (e.g., theatre, film, television). • observe performances of classmates and professional dancers. • recognize that dance is a way of expressing the culture and history of a particular group of people. • recognize the three purposes of dance (ceremonial, recreational, artistic) in society. • identify specific cultures, purposes, and styles of dances.

Grade 4 Dance

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • learn dances from diverse cultures, periods, and/or styles. Explain in learning logs commonalities and differences. • view videos of dances from diverse cultures, periods, and/or styles. Discuss, orally and in writing, use of locomotor and nonlocomotor movements as well as elements of space, time, and force. • use steps and movements characteristic of diverse cultures, periods, and/or styles to create dances. Provide written instructions for dances including descriptions of purpose and meaning for each dance. • listen to audiotapes of music from diverse cultures, periods, and/or styles. Capture the mood of the music through movement. Write articles for school literary journals explaining how music and movement reflect specific cultures, periods, and/or styles. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> • view examples of dances from several cultures. Identify culture from which dances originated. Use steps and movements characteristic of cultures to create dances to perform for multicultural celebrations. • view videos of two different dances. Compare, orally and in writing, purposes of each dance. 	<p>After learning about various dance periods, the fourth- and fifth-grade cluster group working with the artist in residence will choose a different period of music and recreate a period dance (<i>Types of extensions: purpose and appropriateness, level of support, resources and materials, routines and procedures, environment, demonstration of knowledge</i>).</p>

Grade 4 Drama/Theatre

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p>	<p>How do I use the elements of drama to create and perform?</p> <p>How do I use drama to express my ideas and feelings?</p> <p>How do dramatic artists create and/or perform?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use appropriate terminology to discuss elements of drama such as plot, character, visuals (e.g., scenery, costumes, props, makeup), and acting (e.g., voice, expression, diction, projection). • create simple dramatic works using the elements of drama. • demonstrate through performance various types of drama (e.g., improvisation, mimicry, pantomime, role-playing, storytelling).
<p>Cultural Diversity (2.26)</p>	<p>How does drama/theatre reflect cultures, periods, and styles?</p>	<p>Students will</p> <ul style="list-style-type: none"> • describe how dramatic work reflects specific cultures, periods, and styles. • compare and contrast dramatic works from diverse cultures, periods, and styles.

Grade 4 Drama/Theatre

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • act out songs and/or poems incorporating elements of performance. Videotape for peer review. Critique own and others' use of elements of performance. • design and construct dioramas based on plays, stories, and/or movies. Write reviews of plays or movies for classroom newsletter (<i>WP-Transactive</i>). • select characters from books and explore body shapes of characters. Write stories about characters and what happens to them. Create dances to bring characters alive. • use multimedia to create moods and sound effects for dramatic plays. Videotape performances. Create scoring guides for critiquing own work and work of others. • describe audience role before, during, and after performances. Share information via e-mail. • attend theatrical performances. Using appropriate terminology, describe in writing, the relationship between plot, character development and personal response. • demonstrate elements of drama through written plays, puppetry, storytelling, readers' theatre, pantomime, and improvisation. Videotape for peer review. 	<p>Through an interest inventory, Kyle and Megan have shown a high interest in drama. Kyle has been in several community plays and Megan enjoys writing, directing, and performing plays with neighborhood children. Fifth grader Sholanda has auditioned for and received parts in several high school plays and expresses a high interest in pursuing a career in drama. These students will work the gifted and talented teacher and other visual and performing arts students to create and perform an original play for the arts festival (<i>Types of extensions: participation, motivation, purpose and appropriateness, complexity, magnitude</i>).</p>
<p>Students will</p> <ul style="list-style-type: none"> • role-play early life in Kentucky. Use Internet for research. Create monologues to present to classmates. • make hand puppets representing historical characters. Create scenes introducing characters and their contributions to society. • create historical news programs (e.g., Boone discovering the Cumberland Gap). Tape for closed-circuit television. • develop monologues of scientists or historical personalities. Use Internet for researching information. • produce fairy tales and/or plays from different cultures. Videotape for peer review. • describe dramatic works from two cultures. Create and perform skits about the two cultures. Compare in graphic organizers dramatic works of different cultures. 	

Grade 4 Music

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Music (1.14)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity</p>	<p>How do I use the elements of music to create and perform?</p> <p>How do musicians and composers create and/or perform?</p> <p>What are the purposes of music?</p> <p>How do I use music to express my ideas and feelings?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use elements of music (rhythm, melody, form, timbre, harmony, tempo, dynamics) while performing, singing, instrument playing, moving, listening, reading, writing, and creating. • recognize and develop music elements. • use appropriate terminology to describe the purpose of music elements. • use developmentally appropriate performance techniques, practices, and music elements to communicate ideas and emotions.

Grade 4 Music

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • listen to musical examples. Use appropriate terminology to describe purposes of musical elements. • sing songs (e.g., descants, partner songs, rounds, two- and three-part songs) maintaining their own parts. Audiotape performances for comparisons. • read, sing, play, and notate songs using treble clef. Use software for notation. • sing or play on classroom instruments appropriate responses to lead-in phrases. Create scoring guides for critiquing own work and work of others. • use electronic keyboards to perform rhythmic and melodic patterns. Audiotape for peer review. • use pitched and nonpitched instruments to create sound pieces telling stories, creating moods, or accompanying poems or stories. Write personal reflections about effectiveness of compositions (<i>WP-Personal</i>). • identify instruments by families and performance groups (e.g., band, orchestra). Use graphic organizers to compare characteristics. • create lyrics for familiar tunes communicating knowledge learned in other classes (e.g., science, social studies, mathematics). E-mail to friends. • compose music to communicate ideas and emotions. Write personal reflections about effectiveness of compositions (<i>WP-Personal</i>). 	<p>Marty, Ethan, and Carlie have been identified as having high ability in music. They will be grouped with fifth graders also displaying high ability in music for differentiated instruction. The students will use technology to create original pieces of music to be used in the original play created by the drama group. (<i>Types of extensions: motivation, participation, demonstration of knowledge, resources and materials, level of support</i>).</p>

Grade 4 Music

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Music (1.14)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How does music reflect cultures, periods, and styles?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use appropriate terminology to describe music of diverse cultures, periods, and styles. • examine effects of time, place, and personality on music and performance. • perform music from diverse cultures, periods, and styles.

Grade 4 Music

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> perform, alone and with others, music that reflects a variety of cultures, periods, and/or styles. Write articles describing how music elements are used differently in each culture, period, and/or style (<i>WP-Transactive</i>). use graphic organizers to compare music of two cultures, periods, and/or styles. imagine living in other cultures. Using the Internet, research natural resources and cultural elements. Use resources and elements to design musical instruments. Make line drawings of instruments and transfer to standard graph paper. Construct instruments with cardboard, paper, or more permanent materials. Instruments must be able to play three distinct tones. use Internet to research main features of significant composers' music. Create Web pages to present information. 	<p>Pete and Chelsea are working on strategies to improve their processing of the materials they read. Their teacher models reciprocal teaching strategies to assist them in summarizing, generating questions, clarifying, and making predictions about what they have read. They apply the strategy to other print materials to research material resources and cultural elements (<i>Types of extensions: level of support, procedures and routines, order of learning</i>).</p>

Grade 4 Visual Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Visual Arts (1.13)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p>	<p>How do I use the elements and principles of art to create?</p> <p>How do artists create?</p> <p>How do I use art to express my ideas and feelings?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use appropriate terminology to describe the functions of the elements of art and principles of design. • create works of art using the elements of art and principles of design. • compare and contrast visual works of art. • use a variety of media and art processes to produce two- and three-dimensional works of art. • describe how media and processes are used for creating a variety of arts works.
<p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How does art reflect cultures, periods, and styles?</p> <p>What are the purposes of art?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use appropriate terminology to describe art works from different cultures, periods, and styles. • recognize that artists express themselves in different styles. • identify various purposes for creating works of art. • describe the role of visual arts in different cultures.

Grade 4 Visual Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • express ideas by creating works of art. Use appropriate terminology to write descriptive statements about works of art. Include discussion of elements of art and principles of design. • use elements of art and principles of design to create two- and three-dimensional pieces in two different media (e.g., color markers, watercolor, collage). Write in journals about their art work, describing how media and processes, art elements, and principles of design were used. Write how-to articles describing a process to younger readers or peers (<i>WP-Transactive</i>). • create drawings demonstrating use of art elements and principles of design. Use software applications to generate products. • describe use of elements and principles of design in two-dimensional works. Use Venn diagrams to compare similarities and differences. • combine visual art with another art form (e.g., music, dance, drama) to create multimedia products. 	<p>Mariette has studied English before she moved to the United States six months ago but still has limited vocabulary and grammar skills. The teacher asked her to give a show about works of art from her country. The presentation will have a show and tell format and she can use music, family pictures, costumes, or food to make it more informative. She will use a bilingual dictionary to compile a list of words for her presentation and work with the teacher to develop a semantic web. She conferences with the teacher frequently and works with the ESL teacher (<i>Types of extensions: motivation, resources and materials, level of support, participation</i>).</p>
<p>Students will</p> <ul style="list-style-type: none"> • describe art work of two or more cultures, periods, and/or styles. Emphasize use of elements and principles of design. • create word webs around art terminology. Use to describe art reproductions from diverse cultures, periods, and/or styles. • identify parallels in Kentucky art and history. Use computers to create dual time lines. Explain how events shaped and/or influenced art. • research to determine three items used by Native Americans and Early Americans in their daily lives. Create charts showing functions of each item. Also explain use of elements and principles of design for each item. • describe purposes of art works representing various cultures, periods, and/or styles. Access Internet sites for research. • study famous artists' works. Identify defining features using appropriate terminology. Create Web pages to share information. 	<p>Richard is a concrete learner. He can understand individual concepts but has difficulty integrating multiple connections. In order to describe art work, Richard needs prior organizational help. The teacher helps him create a chart with the elements and principles of design. The chart includes illustrations of each (<i>Types of extensions: procedures and routines, resources and materials, order of learning</i>).</p>

Grade 5 Dance

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Dance (1.15)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How do I use the elements of dance to create and perform?</p> <p>How do dancers and choreographers create and/or perform?</p> <p>How do I use dance to express my ideas and feelings?</p>	<p>Students will</p> <ul style="list-style-type: none"> • create a dance that uses the elements of dance. • describe how locomotor (walk, run, skip, hop, jump, slide, leap, gallop) and nonlocomotor (e.g., bend, stretch, twist, swing) movements are used to create simple dances. • create and perform in a small group simple dances with a beginning, middle, and end using a combination of locomotor and nonlocomotor movements. • demonstrate the ability to perform a dance alone, with a partner, and in a small group using three elements of dance (space, time, force). • use appropriate terminology to analyze ideas or emotions expressed through a movement sequence. • use appropriate terminology to describe how two examples of dance are similar and different.

Grade 5 Dance

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create complex dances in a variety of groupings (e.g., alone, with partners, in small groups) that repeat and vary locomotor and nonlocomotor movements and elements of movement (e.g., make changes in time, space, and force/energy). Videotape compositions for peer review. Create scoring guides for critiquing own work and work of others. Use correct terminology when describing observations. • create dances that demonstrate understandings in a variety of content areas. <p>Examples:</p> <ul style="list-style-type: none"> - Read literature selections; determine beginning, middle, and end plot development; and create movement phrases expressing each section of the plot. - In science, describe growth of plant, blooming of its flowers, and seed dispersal through movement sequences. - For vocabulary, look up word meanings and present through movement to classmates. Videotape for peer review. <ul style="list-style-type: none"> • keep daily journals of feelings, observations, and dreams. Select journal entries and translate feelings into movement phrases. Join other students in “quilting” phrases together. Videotape performances and evaluate effectiveness in demonstrating feelings. • use movement to communicate feelings. Create dances demonstrating awareness of form at the beginning, middle, and end. Observe and discuss meaning of dance movements created by fellow students, focusing on feelings expressed (e.g., joy, sadness, anger). • listen to poetry that includes kinesthetic experiences. Respond through movement, using nonverbal communication to convey emotions. Videotape performances. Match poetry to appropriate movement presentations. • watch examples of several dance sequences. E-mail friends describing similarities and differences. Use appropriate terminology to describe in learning logs similarities among dance sequences. 	<p>Donna and Diane have both taken several years of ballet. They will create performances for a dance lesson in which Donna takes the role of a ballet pupil and Diane the role of teacher who instructs and critiques Donna as she performs movement sequences to show a range of emotions (<i>Types of extensions: purpose and appropriateness, complexity, participation, demonstration of knowledge, motivation</i>).</p> <p>Jorie and DeJuan communicate feelings using movement by creating dances using their wheelchairs (<i>Types of extensions: participation, purpose and appropriateness, demonstration of knowledge</i>).</p>

Grade 5 Dance

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Dance (1.15)</p> <p style="text-align: center;">Production (2.22)</p> <p style="text-align: center;">Analysis of Form (2.23)</p> <p style="text-align: center;">Aesthetics (2.24)</p> <p style="text-align: center;">Cultural Heritage (2.25)</p> <p style="text-align: center;">Cultural Diversity (2.26)</p>	<p>How does dance reflect cultures, periods, and styles?</p> <p>What are the purposes dance?</p>	<p>Students will</p> <ul style="list-style-type: none"> • participate in dance activities by performing traditional folk dances, square dances, and ethnic dances (e.g., Native American, African-American). • describe dances of different cultures, purposes, and styles. • analyze personal creations and those of others using appropriate vocabulary. • express openness to differences and commonalities among diverse cultures, purposes, and styles. • demonstrate knowledge of the origin and history of a variety of dances.

Grade 5 Dance

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • perform various dances from diverse cultures, periods, and/or styles. Describe in learning logs similarities and differences. • view videos of dances from diverse cultures, periods, and/or styles. Discuss, orally and in writing, use of locomotor and nonlocomotor movements as well as elements of space, time, and force. • create dances using steps and movements characteristic of diverse cultures, periods, and/or styles. Use appropriate terminology to provide written instructions and descriptions of purpose and meaning for each dance. Create instructional booklets for other dance classes (<i>WP-Transactive</i>). • listen to audiotapes of music from diverse cultures, periods, and/or styles. Capture the mood of the music through movement. Research how composers, music writers, and choreographers capture moods in music and dance. Write articles for school literary journals explaining how music and movement reflect specific cultures, periods, and/or styles (<i>WP-Transactive</i>). • view videos of dances from diverse cultures, periods, and/or styles. Create multimedia presentations demonstrating knowledge of origin and history of dances. • research periods in history. Dance to music the way someone from that time period would have danced. Videotape for peer review. 	<p>Michelle, Brandy, and Charles, advanced social studies students with an interest in dance, will each research the current cultural, social, and political milieu as well as current popular dances in a country of their choice. They create a dance for the millennium that might be performed by teens in the country each selected. They will perform their dances and provide viewers with a synopsis of their research. Viewers will attempt to identify elements that reflect the culture (<i>Types of extensions: purpose and appropriateness, complexity, size, resources and materials, participation, motivation, demonstration of knowledge</i>).</p>

Grade 5 Drama/Theatre

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How do I use the elements of drama to create and perform?</p> <p>How do I use drama/theatre to express my ideas and feelings?</p> <p>How do dramatic artists create and/or perform?</p>	<p>Students will</p> <ul style="list-style-type: none"> • analyze elements of drama such as plot, character, visuals (e.g., scenery, costumes, props, makeup), and acting (e.g., voice, expression, diction, projection) in a variety of dramatic works. • collaborate with others to create dramatic works using the elements of drama. • reflect on, interpret, and revise own work and/or works of others. • use appropriate terminology to evaluate personal dramatic creations and those of others.

Grade 5 Drama/Theatre

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • act out songs and/or poems incorporating elements of performance. Create scoring guides to evaluate effectiveness of performance in demonstrating dramatic elements. • create scripts for several voices. Work with peers to determine production needs. Prepare posters, theme music, and sound effects tapes for production. Present to primary classes (<i>WP-Literary</i>). • share picture books, folk tales, myths, and legends with other students. Adapt stories for dramatic presentations, using monologues, dialogues, narration, improvisation, mimicry, pantomime, role-playing, and/or storytelling. Use movement and voice to convey emotion. Select props that support the action. Videotape presentations for peer review. Reviews should include explanations of body language, voice, and expression used for conveying emotions. • select characters from books and explore body shapes of characters. Write stories about characters and what happens to them. Create dances to bring their characters alive. Analyze dance interpretations for appropriate character representation. • use multimedia to create moods and sound effects for dramatic plays. Videotape performances. Create scoring guides for critiquing own work and work of others. • attend theatrical performances. Using appropriate terminology, analyze in learning logs the relationships between plot, character development, and elements of production. Write reviews of the performance for the school or local newspaper (<i>WP-Transactive</i>). • create skits about scientific facts or concepts (e.g., characteristics of different planets, systems of the body, mammals, cyclical nature of life). Videotape for peer review. 	

Grade 5 Drama/Theatre

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How does drama/theatre reflect cultures, periods, and styles?</p>	<p>Students will</p> <ul style="list-style-type: none"> • communicate recognition of specific cultures, periods, and styles within dramatic works. • examine the effects of time, place, and personality on dramatic works. • create products or performances to demonstrate drama from diverse cultures. • describe and discuss theatres' roles in and contributions to communities.

Grade 5 Drama/Theatre

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • research states and create scripts encouraging friends to visit. Develop multimedia presentations. • make hand puppets representing historical characters. Create scenes introducing characters and their contributions to society. • role-play historical characters. Develop scripts, costumes, and props. Tape performances for peer review. • develop monologues about scientists, historical personalities, and/or specific historic events. Use Internet for researching information. Present to classmates. Create scoring guides for critiquing own work and work of others. • compare original and other versions of the same folktale. Create Web pages to present information. • describe dramatic works from two cultures. Create and perform skits about the two cultures. Compare, orally and in writing, how cultures were reflected in dramatic work. • create improvisational conversations representing different view points of regions of the world or country. 	<p>Sandy is visually impaired. She works with a peer to create Web pages, researches how to make Web pages accessible to individuals with disabilities and uses magnifying devices to help her access Web pages. Her teacher gives her additional time for her assignment (<i>Types of extensions: resources and materials, time, level of support</i>).</p>

Grade 5 Music

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Music (1.14)</p> <p style="text-align: center;">Production (2.22)</p> <p style="text-align: center;">Analysis of Form (2.23)</p> <p style="text-align: center;">Aesthetics (2.24)</p> <p style="text-align: center;">Cultural Heritage (2.25)</p> <p style="text-align: center;">Cultural Diversity (2.26)</p>	<p>How do I use the elements of music to create and perform?</p> <p>How do musicians and composers create and/or perform?</p> <p>What are the purposes of music?</p> <p>How do I use music to express my ideas and feelings?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use elements of music (rhythm, melody, form, timbre, harmony, tempo, dynamics) while performing, singing, instrument playing, moving, listening, reading, writing, and creating. • analyze how elements of music are used in performing, listening to, and/or creating music. • create music with developmentally appropriate performance techniques, practices, and music elements to communicate ideas and emotions. • create a simple composition using the elements of music.
	<p>How does music reflect cultures, periods, and styles?</p>	<p>Students will</p> <ul style="list-style-type: none"> • compare and contrast music of diverse cultures, periods, and styles using appropriate terminology. • create products to demonstrate music from diverse cultures, periods, and styles.

Grade 5 Music

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • sing songs (e.g., descants, partner songs, rounds, two- and three-part songs) maintaining their own parts. Audiotape performances for comparisons. Use expressive and stylistic qualities when performing. • read, sing, play, and notate more complex songs using treble clef. Use software for notation. • sing or play on classroom instrument appropriate responses to lead-in phrases. Create scoring guides for critiquing own work and work of others. • use electronic keyboards to perform rhythmic and melodic patterns. Audiotape for peer review. • use pitched and nonpitched instruments to create sound pieces telling stories, creating moods, or accompanying poems or stories. Write personal reflections about effectiveness of compositions (<i>WP-Personal</i>). • identify instruments by their families and performance groups (e.g., band, orchestra). Use graphic organizers to compare information. • create lyrics for familiar tunes communicating knowledge from other classes (e.g., science, social studies, mathematics). • compare same compositions played by two groups. Audiotape for comparison. Evaluate quality and effectiveness of each performance. • create mock talk shows and discuss roles of music in today's society. 	
<p>Students will</p> <ul style="list-style-type: none"> • perform, alone and with others, music that reflects a variety of cultures, periods, and/or styles. Write articles for school literary journals comparing how musical elements are used in different cultures, periods, and/or styles (<i>WP-Transactive</i>). • use graphic organizers to compare distinguishing characteristics of music from two cultures, periods, and/or periods. • listen to compositions from different musical periods. Research periods and create posters featuring appropriate art work, clothing, architecture, dances, or theatrical productions. • use Internet to research main features of significant composers' music. Create Web pages to present information. 	<p>Madison enjoys the arts and is a member of a choir where she uses sign language to communicate the words and mood of music. She is deaf. She views videos of dances set to music of different musical periods. She also sees a variety of productions at a local community theatre (<i>Types of extensions: purpose and appropriateness, environment of learning, participation, motivation</i>).</p>

Grade 5 Visual Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Visual Arts (1.13)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How do I use the elements and principles of art to create?</p> <p>How do artists create?</p> <p>How do I use art to express my ideas and feelings?</p>	<p>Students will</p> <ul style="list-style-type: none"> • express ideas, images, or patterns utilizing elements of art and principles of design. • analyze how elements of art and principles of design are used in variety of art works. • reflect on, interpret, and revise own works or those of others. • use appropriate terminology to evaluate personal artistic creations and those of others. • use a variety of media and art processes to produce two- and three-dimensional works of art. • describe how media and processes are used for creating a variety of art works. • analyze how responses to personal works of art and the works of others are influenced by various media and processes.

Grade 5 Visual Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • express ideas by creating works of art. Use appropriate terminology to write descriptive statements about work. Include descriptions of elements of art and principles of design. • access elements of art and principles of design to create two- and three- dimensional pieces in two media (e.g., color markers, watercolor, collage). Write in learning logs about art work, analyzing how media and processes, art elements, and principles of design were used. • compare two-dimensional art works. Describe, using appropriate terminology, use of elements and principles of design. Create Venn diagrams to compare similarities and differences among art works. • design multimedia presentations about purposes of art and roles visual arts plays in today’s society. • study famous artists’ works. Use appropriate terminology to identify features. • respond in writing to visual works of art. <p>Examples:</p> <ul style="list-style-type: none"> - Storytelling: Choose art works depicting people involved in actions or events. Study people’s expressions, gestures, and interactions. Piece together stories the artist has told. Write stories, drawing from specific aspects of work of art as much as possible (<i>WP-Literary</i>). - Poems: Examine works of art and write phrases or sentences about each element. Combine phrases or sentences to create poems. Add words or phrases to connect and help poems flow (<i>WP-Literary</i>). - Journals: Select works or art that depict at least one person. Imagine becoming that individual. Write journal entries about what they are doing, thinking, and feeling at that moment in time. Look carefully at works of art for clues. 	

Grade 5 Visual Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Visual Arts (1.13)</p> <p>Production (2.22)</p> <p>Analysis of Form (2.23)</p> <p>Aesthetics (2.24)</p> <p>Cultural Heritage (2.25)</p> <p>Cultural Diversity (2.26)</p>	<p>How does art reflect cultures, periods, and styles?</p> <p>What are the purposes of art?</p>	<p>Students will</p> <ul style="list-style-type: none"> • examine the effects of time, place, and purpose on art forms. • investigate and communicate the differences and commonalities in visual artistic expressions from diverse cultures and periods. • demonstrate through products, forms of an art from diverse cultures. • create products that demonstrate forms of art from diverse cultures.

Grade 5 Visual Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • compare art work of two or more cultures, periods, and/or styles. Emphasize use of elements and principles of design. Use graphic organizers to compare elements. • access Internet sites to research art of other cultures, periods, and/or styles. Explain purposes of art and note any connections to today's society. • create art using motifs, techniques, and other influences of selected cultures. Create scoring guides for critiquing own work and work of others. • identify parallels in art and history. Create dual time lines that illustrate significant events and write articles for school literary journal explaining how world events shaped and/or influenced art (<i>WP-Transactive</i>). <p>Technology suggestion: Use software to create time lines.</p> <ul style="list-style-type: none"> • use digital cameras to take pictures from encyclopedias of art forms from diverse cultures, periods, and/or styles. Use multimedia technology to show examples to classmates. • research items used by other cultures in their daily lives. Create charts showing functions of each item. Explain use of art elements and principles of design in each item. • research and create masks of different cultures. In small groups, write original folk tales about masks and present in puppet shows (<i>WP-Literary</i>). 	<p>Sally has difficulty creating objects when fine-motor skills are required. Have her work with a peer to create masks. Sally can dictate the necessary details and her peer can create the mask (<i>Types of extensions: level of support, demonstration of knowledge</i>).</p>

Arts and Humanities Glossary

Dance/Movement

Actions: What the body is doing. Includes locomotor and nonlocomotor movements.

Alignment: Body placement or posture; proper alignment lessens body strain and promotes dance skills.

Asymmetry: Uneven, irregular design.

Binary form: Two-part structure; AB

Dance phrase: A logical sequence of movements with an observable beginning, middle, and end.

Dynamics: The dance element which relates to how a movement is done.

Energy:

Tension/relaxation: Tension feels hard and tight; relaxation feels soft, loose and floppy.

Flow: Bound or free; flow has to do with the ongoingness of movement when energy is released freely, we describe the movement as free flow, when energy is released in a controlled, restrained manner, the movement is bound.

Weight: Strength (force) or lightness.

Even rhythm: Movements of equal duration.

Form: Structure of dance compositions.

General space: The space shared by all; reaches beyond personal space.

Kinesphere: See personal space.

Locomotor: Movements that usually travel through space.

Walk: Steps are from one foot to the other, the weight being transferred from heel to toe.

Run: Compares to a fast walk, except that in the run the weight is carried forward on the ball of the foot.

Hop: A transfer of weight by a springing action from one foot to the same foot.

Jump: The transfer of weight from two feet to two feet.

Leap: A transfer of weight from one foot to the other foot, pushing off with a spring and landing on the ball of the foot, letting the heel come down, and bending the knee to absorb the shock.

Skip: A hop and a step on the same foot, alternating feet.

Gallop: A combination of a step and a leap, in an uneven rhythm, moving sideward, so the same foot is always leading.

Slide: A combination of a step close step, in an uneven rhythm, moving sideward, so the same foot is always leading.

Metric rhythm: The grouping of beats in a recurring pattern.

Motif symbols: Symbols that represent movements.

Movement vocabulary: All the actions the body can make.

Arts and Humanities Glossary

Dance/Movement

Nonlocomotor: Movements in which a person stays in one place.

Bend: Involves closing up at body joints. It usually feels like it has a stopping point.

Stretch: Involves opening up the joints. Is more than just straightening, it feels like the energy keeps on going.

Push and pull: Involves action similar to a bend and stretch, but with a sense of resistance.

Rise and sink: Allows a change of levels between low and high.

Shake: A floppy wiggle or a tense vibration.

Swing and sway: Swinging is a very exhilarating, freeing movement. A fall, giving into gravity, followed by a rebound to a suspension point before the fall begins again. A sway is more controlled, even shifting of weight.

Twist and turn: Both involve rotation. In a twist, one end is fixed, so there is a limit to how much the other end can move.

Personal Space: Also called kinesphere. The space reached while stationary.

Qualities: Characteristics of a movement.

Relationships: The body's position relative to something or someone.

Rondo form: A dance structure with three or more themes where one theme is repeated, ABACAD....

Space:

Direction: Forward, backwards, sideways, up, down, etc.

Size: Large and small movements.

Pathways: Patterns we make as we move through the air on the floor.

Level: The vertical distance from the floor, high, medium or low.

Shape: The design of the body as it exists in space. Aspects of shape are open/closed, symmetrical/asymmetrical, angular/curved.

Symmetry: A balanced, even design.

Ternary Form: Three-part structure; ABA

Time: The relationship of one movement or part of a movement to another.

Pulse: The ongoing underlying beat.

Speed: How fast or slow the movement is.

Duration: The length of time the movement lasts; a long time, a short time or something in between.

Rhythm: Patterns made by arranging long and short sounds or strong and light sounds.

Phrases: Longer sequences of movement.

Uneven rhythms: Movements of unequal duration.

Arts and Humanities Glossary

Drama/Theatre

Acoustics: The quality of a room in respect to transmission of sound.

Action: The core of a theatre piece; the sense of forward movement created by the sense of time and/or the physical and psychological motivation of characters.

Acting Styles: A particular manner of acting which reflects cultural and historical influences.

Acts: The major sections of a play.

Actor: A male actor.

Actress: A female actor.

Antagonist: One who opposes and actively competes with another in a play, most often with the protagonist.

Arena: A theatre in which the stage is at the center of the auditorium.

Artistic choices: Selections made by theatre artists about situation, action, direction, and design in order to convey meaning.

Audience: Those who are not part of the production.

Backdrop: Painted curtain without fullness.

Backstage: Area behind scenery not visible to the audience.

Blackout: All stage lights go off simultaneously.

Blocking: The path formed by the actors movement on stage usually determined by the director with assistance from the actor and often written down in a script using commonly accepted theatrical symbols.

Call Backs: A second audition.

Cast: A group of people selected to portray characters.

Center Stage: The area in the center of the stage.

Character: A person portrayed in a drama, novel, or other artistic piece.

Characterization: Putting together all facets of a character.

Arts and Humanities Glossary

Drama/Theatre

Choreography: The movement to music in a play.

Chorus: A group of singers.

Classical: A dramatic form and production techniques considered of significance in earlier times, in any culture or historical period.

Climax: The point of greatest intensity in a series or progression of events in a play which is often the turning point of the plot and leads to some kind of resolution.

Company: Everyone associated with a production.

Complication: A factor, condition, and/or element that complicates the situation in a play.

Conflict: The struggle between opposing forces, ideas, or interests in a play.

Contrasts: Dynamic use of such things as movement/stillness, sound/silence and light/darkness.

Costumes: A style of dress characteristic of a particular country, period, or people, often worn in a play.

Critique: Evaluation or judgement.

Criteria: What you base your judgment.

Cue: Something that precedes the next action.

Cut: To stop action; delete

Denouement: The solution, clarification, and/or unraveling of the plot of a play.

Development: Progression of the plot or conflict in a play.

Dialogue: Conversation used by two or more characters to express thoughts, feelings, and actions.

Diction: Selection and pronunciation of words; clarity of speech.

Director: The one who brings all the elements together.

Discovery: A revelation, something that is suddenly revealed about a character or situation in a play.

Downstage: The area closest to the audience.

Arts and Humanities Glossary

Drama/Theatre

Drama: The art of composing, writing, acting, or producing plays; a literary composition intended to portray life character or tell a story usually involving conflicts and emotions exhibited through action and dialogue, designed for theatrical performance.

Dramatic media: Means of telling stories by way of stage, film, television, radio, or computer discs.

Dramatic play: Spontaneous dramatic enactment often done by children pretending or imitating while playing.

Dress Rehearsal: Same as performance without an audience.

Duet: Acting two people perform on stage.

Electronic media: Means of communication characterized by the use of technology; radio, computers (e.g., virtual reality).

Elements of Drama:

Character: Person or animal.

Theme: The basic idea of a play.

Spectacle: Visual

Plot: In literature, the action of the story; in theatre, the action of the story presented on stage.

Spectacle: A public performance.

Theme: The idea, point of view, or perception that binds together a work of art.

Ensemble: The dynamic interaction and harmonious blending of the efforts of the many artists involved in the dramatic activity of theatrical production.

Environment: Physical surroundings that establish place, time, and atmosphere/mood; the physical conditions that reflect and affect the emotions, thoughts, and actions of characters.

Exposition: The part of a play that introduces the theme, chief characters, and current circumstances.

Falling action: The series of events following the climax.

Foil: One that by strong contrast underscores the distinctive characteristics of another and, sometimes, prevents someone or something from being successful.

Folktales: Any story or tale passed on traditionally and based on superstition or false beliefs.

Foreshadowing: An indication beforehand of something that is about to happen.

Front of house: Box office and lobby of a theatre.

Freytag pyramid: A triangular diagram that shows how a plot or storyline progresses.

Arts and Humanities Glossary

Drama/Theatre

Imaging: A technique which allows the students to slow down and focus individually on an issue. The students, sitting quietly with eyes closed, allow pictures to form in their minds. These images may be motivated by bits of narration, music, sounds, smells, etc.

Imitate: To copy or mimic the actions, appearance, mannerisms, or speech of others.

Improvisation: The spontaneous use of movement and speech to create a character or object in a particular situation.

Kinesthetic: Resulting from the sensation of bodily position, presence, or movement.

Mime: Stylized pantomime which is more exaggerated than typical pantomime.

Mimicry: The practice of mimicing or imitating.

Mirroring: Copying the movement and/or expression or look of someone else exactly.

Monologue: A long speech made by one person, often called a soliloquy.

Mood: The emotional feeling of a play.

Motivation: An incentive or an inducement for further action for a character.

Myths: Traditional stories dealing with supernatural beings, ancestors, or heroes.

Pantomime: A situation where a performer relies totally on gesture, facial expression, and movement, rather than speech, for enactment of his material.

Playwright: A person who writes a play.

Projection: How well the voice carries to the audience.

Prompt: The book or help; the prompter is the one who assists actors in remembering their lines.

Props: Any article, except costume or scenery, used as part of a dramatic production.

Proscenium: The area located between the curtain and the front edge of the stage.

Protagonist: The leading character in a play or other literary work..

Reader's theatre: Where two or more oral readers interpret a characterized script with the aim of stimulating the audience to imaginatively experience the literature.

Reversal: A change in fortune for a character from better to worse.

Rising action: A series of events following the initial incident and leading up to the dramatic climax.

Arts and Humanities Glossary

Drama/Theatre

Role: The characteristics and expected social behavior of an individual in a given position (e.g., mother, employer). Role portrayal is likely to be more predictable and one-dimensional than character portrayal.

Role playing: Improvising movement and dialogue to put oneself in another's place in a particular situation and often to examine the person(s) and/or situation(s) being improvised.

Royalties: Monies paid for permission to stage a play.

Scene: A small section or portion of a play.

Scenario: An outline of a hypothesized or projected chain of events or plot for a dramatic or literary work.

Scenery: The painted backdrop on a theatrical stage.

Script: The written dialogue, description, and directions provided by the playwright.

Sensory recall: Recalling an event that pertains particularly to one of the five senses.

Set or Setting: The scenery constructed for a theatrical performance.

Situation: A combination of circumstances at a given moment.

Soliloquy: A speech where a character reveals his thoughts in the form of a monologue without directly addressing the listener.

Space: A defined area. Fore, middle, and background in a two dimensional work.

Special effects: Visual or sound effects used to enhance a theatrical performance.

Stage business: Actions or behavior of an actor on stage used to give information, enhance character, define focus, or establish atmosphere.

Stage directions: Directions written into a script that provide assistance to the actors and director of a theatrical performance.

Staging: That which is created on stage while directing a theatrical presentation.

Storyline: The plot or plan of action.

Storytelling: The act of telling a story in the oral tradition.

Tension: The atmosphere created by unresolved, disquieting, or inharmonious situations that human beings feel compelled to address.

Arts and Humanities Glossary

Drama/Theatre

Text: The basis of dramatic activity and performance; a written script or an agreed-upon structure and content for an improvisation.

Theatre: The imitation/representation of life, performed for other people; the performance of dramatic literature, drama, the milieu of actors and playwrights, the place, the place that is the setting for dramatic performances.

Turning point: The climax or high point of a story.

Thrust: A stage that extends beyond the proscenium arch and is usually surrounded on three sides by seats.

Understudies: Actors who are able to play a given role in an emergency.

Upstage: Area furthest away from the audience, toward the backstage wall.

Voice: The combination of qualities an actor uses such as articulation, phrasing, pronunciation, etc.

Arts and Humanities Glossary

Music

A capella: Unaccompanied vocal music.

Al fine: To the finish.

Alto: The lowest female voice or unchanged boy's voice.

Aria: An air, song, or tune.

Arpeggio: Playing or singing the notes of a chord consecutively as on a harp.

Balance: The state of equilibrium where all the component parts of the music create a unified whole.

Bar lines: Lines dividing measures on the staff.

Bass: The male voice with the lowest range. Also the lowest instrumental voices.

Bass clef: Symbol placed on the five-line staff in traditional notation indicating the pitch of the notes and locating F on the fourth line from the bottom.

Beat: The regular repeated pulsation in music.

Binary: Designates a form or structure in music that has two distinct sections: part A and part B (AB form). "Greensleeves" is an example.

Call and response: A song style that follows a simple question-and-answer pattern in which a soloist leads and a group responds.

Chord: Three or more different tones played or sung at the same time.

Chordal: Made up of chords.

Chromatic modulation: The process of changing from one key to an unrelated key in a composition.

Chromatic scale: A scale consisting of successive half-steps.

Clef: A character used to determine the name and pitch of the notes on the staff to which it is prefixed.

Coda: A few measures or a section added to the end of a piece of music to make a more effective ending.

Common time: (C) Meter in which a measure consists of four beats and a quarter note has a value of one beat.

Compose: The act of inventing or creating music or the result of this creation.

Arts and Humanities Glossary

Music

Counter melody: An alternate melody sung along with and as a companion to the main melody.

Da capo: From the beginning.

Dal segno: Repeat from the sign.

Descant: A melodic voice part pitched higher than and concurrent with the melody.

Dissonance: When there is a feeling of instability or tension in the texture of a piece of music.

Dotted half-note: In traditional notation, adding a dot after a note increases its value by half (e.g., since a half-note is frequently given two beats, a dot after it gives it three).

Duple: Double rhythm of two beats to the measure.

Dynamic markings: Indicates the degrees of intensity or loudness in musical tones.

Elements of music:

Dynamics: Degrees of loudness.

Crescendo: (<) Gradual increase in volume.

Decrescendo: (>) Gradual decrease in volume.

Forte: (*f*) Loud or strong.

Fortissimo: (*ff*) Extremely loud.

Mezzo-Forte: (*mf*) Medium loud.

Mezzo-Piano: (*mp*) Medium soft.

Piano: (*p*) Soft

Pianissimo: (*pp*) Very soft.

Form: The overall structural organization of a music composition (e.g., ab, aba, call and response, rondo, theme and variations, sonata-allegro) and the interrelationships of music events within the overall structure.

AB: A form made up of two contrasting sections, each of which may or may not be repeated

ABA: A form made up of a principal section which is repeated after the completion of a contrasting section.

Rondo: An instrument piece in which the leading theme is repeated, alternately with others.

Round: A composition for two or more voices in which one voice enters after another in exact imitation of the first.

Sonata-Allegro Form: A form made up of an opening section called the exposition in which major themes are presented, a middle section called the development in which thematic material undergoes a variety of alterations, and a third section called the recapitulation in which the material of the exposition is restated.

Theme and variations: A compositional form where an initial theme is stated and each section.

Harmony: Two or more tones sounding together.

Melodic shape/Melody: The rational progression of single tones.

Rhythm: The organization of sound in time; the temporal quality of sound.

Arts and Humanities Glossary

Music

Tempo: The speed of the beat in music..

Allegro: A rapid, vivacious movement, literally “happy.”

Andante: An easily flowing movement in moderate time, literally a “walking” speed

Timbre: The character or quality of a sound that distinguishes one instrument, voice, or other sound source from another.

Ensemble: Playing together of several performers.

Fermata: (∩) A pause or hold of variable length determined by the performer or conductor.

Flat: (b) A musical sign that lowers a pitch 1/2 step.

Fusion: The combination of jazz and rock.

Genre: A type or category of music (e.g., sonata, opera, oratorio, art song, gospel, suite, jazz, madrigal, march, work song, lullaby, barbershop, Dixieland.).

Grand staff: A staff that includes the treble and bass staff and the ledger lines between.

Graphic notation: The use of various symbols, colors and shapes to indicate the melody and rhythm of a composition.

Half-step: The smallest distance between pitch above or below any given pitch on the keyboard, such as C to C# or F to E.

Home tone: Commonly used term for the first or key-tone of any scale, same as tonic.

Improvise: To create music spontaneously.

Interval: The distance between any two pitches and/or notes.

Key: The basic scale and tonality of a composition.

Key signature: The sharps (#) or flats (b) placed at the beginning of a composition or line of music denoting the scale on which the music is based.

Legato: Smooth and connected, lit, “bound together”.

Major: Tonality based on a major scale.

Major scale: A scale built on the formula of an ascending pattern of two whole steps, one half step, three whole steps, one half step.

Melodic motif: A short musical phrase used in development of imitation.

Arts and Humanities Glossary

Music

Meter: The grouping in which a succession of rhythmic pulses or beats is organized, indicated by a meter signature at the beginning of a work.

Meter signature: An indication of the meter of a musical work, usually presented in the form of a fraction, the lower number of which indicates the unit of measurement and the upper number of which indicates the number of units that make up a measure.

MIDI: Acronym for Musical Instrument Digital Interface. Standard specifications that enable electronic instruments such as the synthesizer, sampler, sequencer, and drum machine from any manufacturer to communicate with one another and with computers.

Minor: Tonality based on a major scale.

Minor scale: A scale built on a formula of an ascending pattern of whole step, half step, whole, whole, half, whole, whole.

Monophonic: A texture featuring a single unaccompanied melodic line.

Motif: A small melodic fragment repeated within a melody.

Musical forms: A concept of organization governing the order, character, meter, and key of a composition.

Natural: (\natural) A musical sign that cancels a sharp or flat. A natural note is one that is neither sharpened or flattened.

Notate/Notation: The representation of musical tones by written characters.

Notes: Symbols of Sound.

Whole: A note that receives 4 counts when 4 is the bottom number of the meter signature.

Half: A note that receives 2 counts when 4 is the bottom number of the meter signature.

Quarter: A note that receives 1 count when 4 is the bottom number of the meter signature.

Eighth: A note that receives 1/2 count when 4 is the bottom number of the meter signature.

Sixteenth: A note that receives 1/4 count when 4 is the bottom number of the meter signature.

Octave: The distance between notes of the same name and eight letter notes higher or lower; for example; A B C D E F G A

Opera: Sung drama.

Ostinato: A short melodic or rhythmic pattern that is repeated over and over to form an accompaniment.

Overture: A musical introduction to an opera, oratorio, etc. A concert overture is an independent composition.

Arts and Humanities Glossary

Music

Pentatonic scale: Any five-tone scale. Often used as a scale similar to the pattern of the black keys on the piano.

Percussive sounds: Any sounds produced by striking, shaking and/or scraping.

Phrasing: Dividing musical sentences into melodic and/or rhythmic sections, similar to the effect of punctuation in language.

Pitch: The highness or lowness of a tone, as determined by the frequency of vibrations per second.

Pitch numbers: The numbers 1 through 8 associated with the tones of the scale to assist in music reading and in ear training.

Polyphonic: A texture in which two or more melodies sound at the same time.

Quartet: Four performers.

Question and answer: A formal structure where each successive phrase or section is formed as a response to the preceding one.

Quintet: Five performers.

Recitative: In opera and oratorio, sung narration.

Repeat signs: Signifies that the music between double-dotted bars is to be repeated.

Rests: A pause or interval of silence between two notes.

Scale: A sequence of tones, usually within an octave, used as the basis of a composition.

Score: A notation showing all the parts of a musical composition.

Sequence: A pattern within a melody that is repeated at a higher or lower pitch.

Sforzando: (*sfz*) Forcing, i.e., with a sudden and strong accent on a single note or chord.

Sharp: A musical sign that raises a pitch $\frac{1}{2}$ step.

Signatures: The flats and sharp at the head of the staff indicating the key.

Solo: One performer.

Slur: To perform two or more notes legato. Also, a curved line placed above or below two or more notes of different pitch to indicate that they are to be performed in legato style.

Arts and Humanities Glossary

Music

Soprano: The highest female voice.

Staccato: Detached sounds, indicated by a dot over or under a note. The opposite of legato.

Staff: The five parallel lines on which music is written.

Standard notation: Music written on one or more staves, using traditional note symbols and clefs to indicate pitch locations.

Staves: Plural of staff.

Style: The distinctive or characteristic manner in which the elements of music are treated. In practice, the term may be applied to, for example, composers (the style of Copland), periods (Baroque style), media (keyboard style), nations (French style), form or type of composition (fugal style, contrapuntal style), or genre (operatic style, bluegrass style).

Symbolic notation: The system of expressing musical sounds through the use of written symbols called notes.

Syncopation: A temporary shifting of the accent in music so that the stress falls between the strong beats.

Tenor: The highest male voice.

Ternary: Designates a form or structure in music that has three sections, with the first section repeated after the second section (ABA form).

Texture: The number of simultaneous sounding lines. The manner in which horizontal pitch sequences are organized (homophonic-monophonic-polyphonic).

Time: The division of the measure into equal parts.

Tonality: The term used to describe the organization of the melodic and harmonic elements to give a feeling of a key center or a tonic pitch.

Tonal syllables: Syllables used to facilitate reading and singing of the scale. The commonly used syllables are do, re, mi, fa, sol, la, ti, and do. The practice of reading and singing with syllables is also known as solfege.

Tonic: The first tone or key-tone of any scale.

Treble: The upper part. Sung pitches generally above middle C.

Arts and Humanities Glossary

Music

Treble clef: Symbol placed on the five-line staff in traditional notation indicating the pitch of the notes and locating G on the second line from the bottom.

Triads: Three-tone chords.

Two-part songs: Songs written for performance by two distinct voices.

Unison: Singing or playing the same notes by all singers or players, either at exactly the same pitch or in a different octave.

Verse-chorus: A refrain that is repeated.

Voice:

Soprano: the highest pitch of human voice.

Alto: the lowest female voice.

Tenor: the highest male voice.

Bass: the lowest pitch of human voice.

Whole step: A distance of two half steps in the same direction, such as between C and D or F# and E.

Whole tone scale: A scale made up entirely of whole tones (whole steps).

Arts and Humanities Glossary

Visual Arts

Abstract: Art that looks as if it contains no recognizable form.

Acrylic paint: A water based paint that has a polymer binder and dries to a permanent covering.

Aesthetic: The study or Theory of the beautiful in art.

Alternating rhythm: Repeating motifs but changing the position, content or spaces between them.

Analyze: In visual art, examining the unique features of a work of art as they relate to the elements of art and principles of design.

Art criticism: The process and result of critical thinking about art. It usually involves the description, analysis and interpretation of art, as well as some kind of judgement.

Assemblage: Sculpture consisting of many objects and materials that have been put together.

Asymmetry: A way of organizing the parts of a design so that one side differs from the other without destroying the overall balance and harmony. Also known as informal balance.

Background: Part of the picture plane that seems to be farthest from the viewer.

Canvas: A tightly stretched cloth surface on which to paint.

Ceramics: The process of creating functional and nonfunctional art forms made of clay.

Chiaroscuro: Using contrast of light and dark to create the illusion of three-dimensional form on a two-dimensional surface.

Collage: Artwork made by pasting pieces of paper or other materials to a flat surface.

Color groups: Sometimes known as color families or relationships. Groupings of colors that have certain likenesses or differences.

Color theory: As used in the core content, the study of pigmented color (subtractive color theory) as opposed to light (additive color theory). The color wheel is based on Goethe (1810/1970) with red, yellow, blue as primaries which when mixed form the secondaries of orange, green and violet.

Analogous: Colors that are next to each other on the color wheel, and are closely related, e.g., red, red-orange, orange etc.

Complementary: Color group that uses colors opposite from each other on the color wheel. Red and green, blue and orange, yellow and violet have the greatest degree of contrast.

Cool colors: The color group that is associated with the sky, water, and forests such as blue, green and violet. Cool colors appear to recede in space.

Hues: The property of color that is the pure color or the name for the color that has not been altered.

Arts and Humanities Glossary

Visual Arts

Intensity: The property of a color that refers to the brightness or dullness of a color.

Monochromatic: Tones of one color in addition to the main hue.

Neutral colors: Black, white, gray (and browns). Colors may be “neutralized” by mixing complements.

Primary colors: Hues that cannot be produced by a mixture of other hues (red, yellow, blue).

Secondary colors: Violet, Green, Orange. Hues that can be produced by mixing the primary hues. Red and blue make violet. Yellow and blue make green. Red and yellow make orange.

Shades: When black is added to a hue to darken a color.

Tertiary Colors: Those colors that fall between primary and secondary colors on the color wheel.

Tints: Obtained by adding white to the hue to lighten a color.

Triadic: The color group that uses three colors of equal distance from each other on the color wheel, forming an equilateral triangle, i.e. red, yellow, blue.

Value: In color theory, value refers to the lightness (tint) or darkness (shade) of a color, i.e. pink is a tint of red.

Warm colors: The color group that is associated with fire, the sun, the earth such as red, orange and yellow. Warm colors appear to advance in space.

Color wheel: A tool for organizing color.

Composition: An arrangement of the elements of art and principles of design in a work.

Computer design: Any visual expression (original art, functional graphics, scientific illustrations) created with a computer.

Describe: This process in responding to art work refers to art elements present in a work. It also refers to when, where, and by whom the work was done. Often this information is given beneath the art work in the assessment booklet.

Depth: Showing distance in a work of art.

Dimensional:

Two (2-D): A work of art that has length and width.

Three (3-D): A work of art which has length, width, and depth.

Elements of art: The basic components of visual communication. They include line, space, shape/form, value, color, texture.

Color: The results of the reflection or absorption of light by a surface.

Form: An element of art that is three-dimensional and encloses volume.

Line: The element of art which refers to the continuous mark made on some surface by a moving point (curved, zigzag, straight, etc).

Shape: The element of art that is an enclosed space determined by other art elements such as line, color, value and texture. It is a two-dimensional element.

Arts and Humanities Glossary

Visual Arts

Space: The element of art that refers to the distance or area between, around, above, below, or within things (positive and negative).

Texture: The element of art that refers to the surface quality or “feel” of an object, its roughness, smoothness, softness.

Value: The element of art that refers to the degree of lightness or darkness.

Fibers: A natural or synthetic filament, such as cotton or nylon, which can be used in the construction of textiles.

Focal point: That area in a composition at which the emphasis is greatest (the center of interest).

Foreground: Part of a picture which appears closest to the viewer and often is at the bottom of the picture.

Formalist: The effective organization of the elements and principles of design.

Found objects: Common or unusual objects that may be used to create a work of art.

Functional art: Functional objects such as dishes and clothes; often these objects are highly decorated and show expert craftsmanship.

Gradation: The principle of art that refers to a way of combining art elements by using a series of gradual changes in those elements, (transition)

Graphic design: Visual communication intended to be used with commercial printing/reproductive processes in both two and three dimensional presentations.

Impressionistic: Shows the effects of light and atmospheric conditions of an artist’s work that spontaneously captures a moment in time.

Interpret: This process in responding to art work identifies the feelings, moods, and ideas communicated by the work of art. It also calls for the investigation of the influence of time and place upon the artist who created the work of art.

Landscape: The subject matter category in which the main theme of the work is natural scenery such as mountains, valleys, trees, rivers and lakes.

Media: The material used by an artist to produce art (i.e. paint, clay, fibers).

Middleground: Area in a picture between the foreground and the background.

Mimetic: The term for art work whose purpose is to “mimic” or imitate nature.

Mixed media: Any art work which uses more than one medium.

Arts and Humanities Glossary

Visual Arts

Mobiles: A sculpture which has free moving parts.

Motif: Repeated unit to create visual rhythm.

Mural: The principle of design that combines elements to produce the look of action or to cause the viewer's eye to sweep over the work in a certain matter.

Naturalistic: Art work that looks like the subject it is trying to represent.

Papier-mache: Sculpture medium that uses paper or rags dipped in wheat paste (wallpaper paste) over an armature.

Negative space: The areas around images in a two or three-dimensional shape/form which defines those objects.

Oil pastels: This media is similar to chalk pastels but it has an oil base that makes it stick to the surface better and has more brilliant color.

Pastels: Pigments pressed into sticks and used as a dry medium on paper; sometimes referred to as hard or soft chalk pastels.

Perspective: A method of representing three-dimensional objects on a two-dimensional surface, giving the illusion of depth in space. Linear perspective deals with drawing and aerial perspective attempts to use color and value changes to get the effect of distance.

Portrait: A subject matter category in which the main purpose of the art work is to communicate a likeness of an individual or group of individuals.

Positive space: The primary images in a work of art, as opposed to the background or unoccupied space.

Principles of design: Concepts for organizing elements of art into successful art forms.

Balance: The principle of design that refers to the visual equalization of the elements in a work of art. Balance may be either symmetrical or asymmetrical.

Contrast: A principle of art, closely related to emphasis, refers to a way of combining art elements to stress the differences between the elements. Thus a painting may have bright colors which contrast with dull colors, or angular shapes which contrast with rounded shapes.

Emphasis: The principle of design that is concerned with dominance. The development of a main idea or center of interest (focal point).

Movement: The principle of design that combines elements to produce the look of action or to cause the viewer's eye to sweep over the work in a certain manner.

Pattern: The principle of design that is the repetition of shapes, lines, colors, etc. In a design.

Repetition: The principle of art that refers to a way of combining art elements so that the same elements are used over and over to achieve balance and harmony.

Arts and Humanities Glossary

Visual Arts

Rhythm: The principle of design that refers to a way of combining art elements to produce the look and feel of movement, especially with a visual tempo or beat.

Proportion: The principle of design that deals with the relationship in size of one component of a work of art to another.

Unity: The principle of design that refers to the quality of wholeness or oneness that is achieved through the effective use of the elements and principles of design (harmony).

Variety: The principle of art that refers to a way of combining art elements in involved ways to achieve intricate and complex relationships.

Printmaking: The process of reproducing images on a flat surface. Three types of print processes are relief block (linoleum, wood), intaglio (etching, engraving) and stencil (silkscreen).

Processes: Art methods/media used for visual communication in a variety of art forms.

Radial balance: Kind of balance where the elements branch out from a central point.

Random rhythm: Visual rhythm in which a motif is repeated in no apparent order.

Realistic: Art work that attempts a photographic likeness of the subject matter. Sometimes refers to the choice of subject that is commonplace as opposed to courtly and idealized.

Regular rhythm: Visual rhythm created through repeating the same motif with the same distance between placements.

Still life: The subject matter category in which the main purpose of the art work is to show inanimate objects.

Styles: A characteristic manner of presenting ideas and feeling in visual form. May refer to an individual artist or a group of artists whose work has certain features in common.

Symbolic: Works of art that have forms, images, or subjects representing meanings other than the ones with which they are usually associated.

Symmetry: A way of organizing the parts of a design so that one side duplicates or mirrors the other.

Tempera paint: Water based paint that traditionally had pigment mixed with an egg binder. Sometimes called poster paint, this opaque medium now has a chemical binder.

Textiles: Art works that are created from natural or man made fibers. Weaving, basketry, stitchery and knitting are just a few of the processes involved in textile design.

Transition: The principle of art that refers to a way of combining art elements by using a series of gradual changes in those elements, (gradation).

Arts and Humanities Glossary

Visual Arts

Vanishing point: In perspective drawing, a point or points on the horizon where receding parallel lines seem to meet.

Watercolor: Transparent, water based paint that uses gum Arabic as a binder.

Arts and Humanities Teacher Resources

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Arts and Humanities Teacher Resources

Kentucky Arts Council. *Directory of Kentucky Performing Artists*. Frankfort, KY: Kentucky Arts Council, 1995.

Lori Meadows, Kentucky Arts Council, 31 Fountain Place, Frankfort, KY 40601 (502) 564-3757
FAX (502)564-2839 lmeadows@arts.smag.state.ky.us.

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Debbie Shannon, Kentucky Center for the Arts, Five Riverfront Plaza, 501 West Main Street, Louisville, KY 40202 (502)562-0100 FAX (502)562-0105.

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Kentucky Historical Society Old State Capitol, PO Box 1792, 40602-1792 (502)564-3016 FAX (502)564-4701 vicky.middleswarth@mail.state.ky.us.

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Becky Shipp, Kentucky Heritage Council, 300 Washington Street, Frankfort, KY 40601 (502) 564-7005 FAX (502)564-5820 BSHIPP2@ mail.state.ky.us.

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Professional Organizations: Kentucky

Appalshop

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Forward in the Fifth

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Arts and Humanities Teacher Resources

Kentucky Alliance for Arts Education

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Kentucky Association for Gifted Education

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Kentucky Association of School Councils

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Kentucky Association for Environmental Education

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Kentucky Association of Supervision in Curriculum Development

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Different Ways of Knowing (DWoK)

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Kentucky Communications Association

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Kentucky Council for Social Studies

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Kentucky Council for Teachers of English/Language Arts

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Arts and Humanities Teacher Resources

Kentucky Geographic Alliance

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Kentucky Humanities Council

206 East Maxwell Street, Lexington, KY 40508 (606) 257-5932
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Kentucky Resource Center for Heritage Education

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Kentucky Staff Development Council

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Professional Organizations: Regional and National

Alliance for Arts Education (AAE) Network

John F. Kennedy, Center for the Performing Arts, Washington, DC 20566
(202) 416-8800 kcaaen@mail.kennedy-center.org

Americans for the Arts

Kelly White, 1000 Vermont Avenue NW, 12th Floor, Washington, DC 20005
(202)371-2830 FAX (202) 371-0424; One East 53rd Street, New York, NY 10022
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ASCD Arts Education Network

Dr. Gene Van Dyke, Director, The Arts in Education Network Facilitator, 333 Market Street,
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Artsgenesis

New York Office: 310 East 46th Street, Suite 26J, New York, NY 10017
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Arts and Humanities Teacher Resources

Asian American Arts Alliance

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Association for the Advancement of Arts Education

655 Eden Park Dr., Suite 730, Cincinnati, OH 45202

The Getty Education Institute for the Arts

1200 Getty Center Drive, Suite 600, Los Angeles, CA 90049-1683 (310) 440-7315
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Goals 2000 Arts Education Partnership

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International Bluegrass Music Association

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National Arts Education Research Center

32 Washington Place-Room 52, New York University School of Education,
New York, NY 10003 (212) 998-5060

National Arts Education Research Center School of Music University of Illinois,

1114 W. Nevada Street, Urbana, IL 61801
(217) 333-1027 crme@uiuc.edu

National Coalition for Education in the Arts (NCEA)

c/o Music Educators National Conference, 1806 Robert Fulton Drive, Reston, VA
22091 (703) 860-4000 mbmenc@aol.com

National Council of State Arts Education Consultants (NCSAEC)

c/o Supervisor of Visual and Performing Arts, Office of the Superintendent of Public
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National Guild of Community Schools of the Arts

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National Task Force on Folk Arts in Education

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Network of Performing and Visual Arts Schools

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Arts and Humanities Teacher Resources

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Very Special Arts (VSA)

VSA Educational Services

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(202) 737-0645 (TDD)

Arts and Humanities Teacher Resources
Dance
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Dance

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Kentucky Professional Organizations: Kentucky

Kentucky Association of Health, Physical Education, Recreation, and Dance

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National Professional Organizations: National

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National Dance Association, 1010 College Avenue, Manhattan, KS 66502-2708 (913) 532-6887 FAX
(913) 532-7004

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Music
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Arts and Humanities Teacher Resources

Music

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1990.

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ISBN 1-85697-586-X.

Professional Organizations: Kentucky

Kentucky Music Educators Association
Phyllis Vincent, 207 Esperanza Drive, Frankfort, KY 40601 (502) 695-1911
FAX (502) 695-7727, pmvinvent@aol.com

Kentucky Music Teachers Association,
Dr. Denine LeBlanc, 1311 South First Street, Louisville, KY 40208

Professional Organizations: National

American Music Conference,
5790 Armada Drive, Carlsbad, CA 92008 (619) 431-9124
FAX (619) 438-7327

American Choral Directors Association
Gene Brooks, Executive Director, P.O. Box 6310 | Lawton, OK 73506-0310
(580) 355-8161 FAX (580) 248-1465, acda@sirinet.net

American Orff-Schulwerk Association
P.O. Box 391089, Cleveland, OH 44139-8089

The Dalcroze Society of America
Terry Boyarsky, Treasurer, 2812 Fairmount Blvd., Cleveland Heights, OH 44118

Music Educators National Conference
Larry Mullins, 1806 Robert Fulton Drive, Reston, VA 20191-4348 (800) 828-0229
FAX (703) 860-2652, MENC SER@aol.com

Sharon Summers, OAKE Executive Director, P.O. Box 9804, Fargo, ND
58106-9804 (701) 235-0366 FAX (701) 241-7051 wignesg@fargo.k12.nd.us

Arts and Humanities Teacher Resources
Drama and Theater
Publications: Books

- American Alliance for Theater & Education. *National Theater Education Project: A Model Drama/Theater Curriculum*. New Orleans: Anchorage Press, 1987.
- Barker, Clive. *Theater Games: A New Approach To Drama Training*. Portsmouth: HEB Inc., 1977.
- Belt, Lynda D. *Improve Game Book II: A Source Book of Improvisation Performance Games*. Puyallup, WA: Thespis Productions, 1993.
- Belt, Lynda D. *The Actor's Primer: An Acting Course in Making Choices*. Puyallup, WA: Thespis Productions, 1993.
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Drama and Theater

- Duke, Mary Ann, Ed.D. *Writing For Real-World Reasons: A Ten Week Step-By-Step Outline For Teaching Playwriting From Primary To Pre-Teens*. Sarasota, FL: Cognitive Press, 1993.
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- Nobleman, Roberta. *50 Projects for Creative Dramatics*. Rowayton, CT: New Plays Inc., 1980.
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Tanner, Frank Averett. *Creative Communication: Projects in Acting, Speaking and Oral Reading*. Caldwell ID: Clark Publishing Co., 1985.

Texas Educational Agency: *Theater Arts Framework: Kindergarten - Grade 12*. Austin, TX: Texas Educational Agency, 1989.

Thomson, Greg. *Step By Step Theater: Creating Plays for Class Presentation*. Belmont, CA: David S. Lake Publishers, 1989.

Professional Organizations: Kentucky

Kentucky Catholic Forensic League

Garland Blair, 911 South Lincoln Blvd., Larue County High School, Hodgenville, KY 42748
(502) 325-3674

Kentucky Educational Speech and Drama Association

Dr. Cathy Thomas, Breckinridge Hall, Morehead State University, Morehead, KY 40351 (606)
783-2712 cthomas@morehead.st.edu

Kentucky High School Speech League, Judy Woodring, Cherry Hall Rm #1, Western KY
University, Bowling Green, KY 42101 (502) 745-6340 FAX (502) 745-6341
judy.woodring@wku.edu

Kentucky Theater Association, Tim Solis, President, 300 North Broadway, Lexington, KY 40508

Professional Organizations: National

American Alliance for Theater & Education,

Theater Department, Arizona State University, P.O. Box 873411, Tempe, AZ 85287-3411
(602) 965-6064 <http://www.asu.edu/cfa/theatre/orgs/aate/>

The Educational Theater Association / International Thespian Society,

3368 Central Parkway, Cincinnati, OH 45225-2392 (513) 559-1996
FAX (513) 559 - 0012 <http://www.etassoc.org/>

National Federation of Interscholastic Speech and Debate Association,

11724 Northwest Plaza Circle, Kansas City, MO 64195-0626 (816) 464-5400

National Forensic League, James Copeland, PO Box 38, Rippon, WI 54971

(920) 748-6206

Arts and Humanities Teacher Resources
Drama and Theater

The Southeast Institute for Education in Theater, The University of Tennessee at Chattanooga, 615
McCallie Avenue, Chattanooga, TN 37403 (423) 755-5204
FAX (423) 755-4632 scea@cecasun.utc.edu

Arts and Humanities Teacher Resources
Visual Arts
Publications: Books

Clark, Kenneth. *Looking at Pictures*. London: John Murray, 1960.

Cole, Alison. *Eyewitness Art: The Renaissance*. New York: Dorling Kindersley, 1994.
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Yenawine, Philip. *Key Art Terms for Beginners*. New York: Harry Abrams, 1995.

Arts and Humanities Teacher Resources
Visual Arts
Professional Organizations: Kentucky

Kentucky Art Education Association

Joanne Guilfoil, Eastern Kentucky University, Art Department, Richmond, KY 40475 (606) 622-2163

Professional Organizations: National

African American Museums Association

P.O. Box 548, Wilberforce, OH 45384 (937) 376-4611

The Coalition of African American Cultural Organizations

2253 North Broad Street, Philadelphia, PA 19132 (215)-765-5055
pheralynd@aol.com

The Getty Education Institute for the Arts

1200 Getty Center Drive, Suite 600, Los Angeles, CA 90049-1683
(310) 440 -7315 mnowatt@getty.edu

National Art Education Association

1916 Association Drive, Reston, VA 20191-1590 (703) 860-8000
FAX (703) 860-2960

Arts and Humanities Internet Resources

Arts and Humanities

African American Culture
<http://www.bridgesweb.com/>

Alpine Curriculum of Excellence
<http://www.alpine.k12.ut.us/ASD/Curriculum%20ASD/>

ArtsEdNet
<http://www.artsednet.getty.edu>

ArtsEdge
<http://artsedge.kennedy-center.org/artsedge.html>

Arts Education Model Programs
<http://www.aaae.org/models/models.html>

Arts Education Online
<http://www.ucop.edu/tcap/aeol.html>

Arts Wire
<http://www.artswire.org/Artswire/www/NEWmap.html#about>
ASCD Arts Education Network

Dr. Gene Van Dyke, Director gvandyke@northstar.csiu.k12.pa.us
<http://artsedge.kennedy-center.org/ArtsInEd.html>
Connections+
<http://www.mcre.org/connect/plus/>

Creative Impulse: The Artist's view of World History and Western Civilization
<http://history.evansville.net/index.html>

Cultural Arts Resources for Teachers & Students
<http://www.carts.org/index.html>

Edsitement
(National Endowment for the Humanities)
<http://edsitement.neh.fed.us>

The Goals 2000 Arts Education Partnership
<http://aep-arts.org>

Arts and Humanities Internet Resources

Arts and Humanities

Kentucky Educational Television's Distance Learning Site
<http://www.dl.ket.org/>

The Mid-continent Regional Educational Laboratory (McREL) Lesson Plans in the Arts
<http://www.mcrel.org/connect/artslessons.html>

National Standards for Arts/Music Education
<http://www.dancing.com/dance/indexfr.htm>

North Carolina's Curriculum Matrix
<http://www.dpi.state.nc.us/Curriculum/CrrclmMtrx.html>

Saskatchewan Education's On-line Bibliographies Arts Education: A Bibliography for the Elementary Level.
http://www.sasked.gov.sk.ca/curr_inst/iru/bibs/elemarts/

Saskatchewan Education's On-line Bibliographies Arts Education: A Bibliography for the Secondary Level.
http://www.sasked.gov.sk.ca/curr_inst/iru/bibs/secartsed/

Saskatchewan Canada Arts Education Home Page
http://www.sasked.gov.sk.ca/curr_inst/artsed/

Theatre Education Literature Review
<http://www.aaae.org/theatre/thfront.html>

Web Sites and Resources for Teachers
<http://www.csun.edu/~vceed009/>

Arts and Humanities Internet Resources

Dance

A Brief History of the Power of Dance

<http://www.music.sony.com/Music/ArtistInfo/>

Annotated Bibliography for Special Needs Students

<http://www.dance.ohio-state.edu:80/>

British Columbia Ministry of Education integrated Dance Curriculum for grades 8-10.

<http://www.est.gov.bc.ca/.curriculum/www/irps/dance810/datoc.htm>

The "Classical Ballet" Site

http://haas.berkeley.edu/~schlادم/ballet_html/

Cross-Cultural Dance Resources

<http://jan.ucc.nau.edu/~jwk3/index.html>

The Dancers' Archive

<ftp://ftp.std.com/nonprofits/dance/>

Dance Curriculum Resources from Saskatchewan Canada.

<http://www.sasked.gov.sk.ca/docs/artsed/dance102030/>

Dance Magazine On Line

<http://www.dancemagazine.com/>

Dance Section of the World Wide Web Virtual Library

<http://www.dancing.com/dance/indexfr.htm>

Dance Teacher Now Magazine

<http://wwar.com/cgi-bin/gregaccess?da438>

North Carolina Arts Education Curriculum

<http://www.dpi.state.nc.us/curriculum/ArtsEd/ArtsEd.html>

Sapphire Swan Dance Directory

<http://www.SapphireSwan.com/dance/>

World Wide Arts Resources Dance Page

<http://wwar.com/dance/index.html>

Arts and Humanities Internet Resources

Dance

Dance Art.com

<http://www.danceart.com/>

DanceUSA

<http://www.artswire.org/Artswire/danceusa/home.html>

History of American Jazz Dance - Written and developed by Bob Boross of Western Kentucky University. <http://www.wku.edu/~bboross/history.html>

The Jazz Dance Homepage.

<http://www.wku.edu/~bboross/home.html>

Native American Dancing

<http://www.scsn.net/users/pgowder/>

Music

All-Music Guide

<http://www.allmusic.com/>

Archives of African American Music and Culture

<http://www.indiana.edu/~aaamc/websites.html>

Ask ERIC Lesson Plans

<http://ericir.syr.edu/Virtual/Lessons/Arts/Music/>

British Columbia Ministry of Education integrated Music Curriculum for grades 8-10.

<http://www.est.gov.bc.ca/curriculum/irps/music810/mutoc.htm>

Education at the Met

<http://www.operaed.org>

Elementary General Music Teaching and Learning Center

<http://www.potsdam.edu/crane/campbemr/>

Fun Music Ideas

<http://www.rcavictor.com/rca/hits/guide/>

K-8 Music Page

<http://www.u.arizona.edu/~tirwin/>

Arts and Humanities Internet Resources

Music

“Folk Stuff” - Resources for Folk Music

<http://www.rogo.com/folkstuff/>

In Harmony With Education

<http://www.menc.org/>

Internet Music Resources-Sibelius Academy

<http://www.siba.fi/Kulttuuripalvelut/music.html>

Introduction to Classical Music

Music Curriculum Resources from Saskatchewan Canada

<http://www.sasked.gov.sk.ca/docs/artsed/artsmain.html>

Music Education@GSPYO.com

<http://www.gspyo.com/>

Music Education Launch Site

<http://www.talentz.com/index.html>

Music Education Online.

<http://www.geocities.com/Athens/2405/index.html>

Native American Music Resources on the Internet

<http://hanksville.phast.umass.edu/misc/NAresources.html>

Html Resources for Music Educators

<http://www.ed.uiuc.edu/edpsy-387/>

The School Music Program: A New Vision.

[http://www.menc.org./](http://www.menc.org/)

The Virtual Music Classroom

<http://cnet.unb.ca/achn/kodaly/koteach/>

Welcome to Jazz Central Station

<http://jazzcentralstation.com/>

Worldwide Internet Music Resources

http://www.music.indiana.edu:80/music_resources/

WWW Virtual Library: Classical Music

<http://www.gprep.org/classical/index1.html>

Arts and Humanities Internet Resources

Drama/Theatre

African American Theater
<http://www.bridgesweb.com/>

A Brief Guide to Internet Resources in Theater and Performance Studies
http://www.stetson.edu/~csata/thr_guid.html

British Columbia Ministry of Education integrated Drama Curriculum for grades 8-10.
<http://www.est.gov.bc.ca/curriculum/www/irps/drama810/drtoc.htm>

Drama Curriculum Resources from Saskatchewan Canada
http://www.sasked.gov.sk.ca/docs/artsed/g6arts_ed/g6rtblae.html

National Standards for Theater Education
<http://www.byu.edu:80/tmcbucks/arts-ed/StanHome.html>

Storytelling, Drama, Creative Dramatics & Readers Theater for Children...
<http://falcon.jmu.edu/~ramseyil/drama.htm>

Theater Education Literature Review
<http://www.aaae.org/theatre/thfront.html> Women of Color, Women of Words/African-American

Women of Color, Women of Words/African-American Playwrights
<http://www.scils.rutgers.edu/~cybers/home.html>

The Virtual Library: Theater and Drama
<http://www.brookes.ac.uk/VL/theatre/index.htm>

Visual Arts

African American Art
<http://www.artsednet.getty.edu/ArtsEdNet/Resources/Maps/african.html>

ArtsEdNet: The Getty Education Institute for the Arts
<http://www.artsednet.getty.edu/>

Art History Resources on the Web
<http://witcombe.bcpw.sbc.edu/ARTHLinks.html>

ArtLex
<http://www.artlex.com/>

Art Teacher Connection
<http://www.primenet.com/~arted/>

Arts and Humanities Internet Resources

Visual Arts

Art Teacher on the Net

<http://members.tripod.com/~artworkinparis/index-3.html>

AskERIC Lesson Plans : Art

<http://ericir.syr.edu/Virtual/Lessons/Arts/>

Kathy Schrock's Guide for Educators

<http://www.capecod.net/schrockguide/index.htm>

Incredible Art Department

<http://www.artswire.org/kenroar/>

Eyes on Art.

<http://www.kn.pacbell.com/wired/art/art.html>

Learning@Web.Sites : Art Department

<http://www.ecnet.net/users/gdlevin/artdept.html>

National Museum of African Art

<http://www.si.edu/organiza/museums/>

British Columbia Ministry of Education integrated Visual Arts Curriculum for grades 8-10.

<http://www.est.gov.bc.ca/curriculum/irps/visart810/vatoc.htm>

Metropolitan Museum of Art Education Resources

<http://www.metmuseum.org/htmlfile/education/edu.html>

The Museum of Modern Art, New York

<http://www.moma.org>

National Museum of African Art

<http://www.si.edu/organiza/museums/africart/nmafa.htm>

Virtual Curriculum: Elementary Art Education

<http://www.dhc.net/~artgeek>

Visual Arts Curriculum Resources from Saskatchewan Canada

<http://www.sasked.gov.sk.ca/docs/artsed/>

English/Language Arts

Grade 4 English/Language Arts

Course Overview:

A thematic approach to fourth-grade language arts relates each of the five English/Language Arts strands: reading; writing; speaking, listening, observing; inquiry; and technology as communication to each other with activities. Students learn and practice communication skills through authentic tasks connected with broad concepts or themes.

The theme for this course is building and how that relates to students as individuals and members of larger groups. The concept of building as explored in literary works, periodicals, and social issues may refer to many processes. We build ourselves emotionally, physically, and mentally. Relationships, civilizations, and skills are built, as are physical structures. Students write and speak about what they have learned about building, as well as build on their skills and aptitudes to become better communicators and stronger thinkers.

The goal is to provide students with opportunities to learn about themselves and their world through communication while increasing their skills to communicate effectively with others.

Sample activities are intended to integrate multiple strands of communication. Activities include, for instance, inquiring about topics and then presenting that information in writing and speaking. Suggested activities are not comprehensive; that is, they are starting points to plan instruction for required content and may need to be adjusted for individual students and school situations.

Guiding Questions:

- How has the building and restoration of homes affected Kentucky's history?
- How are homes built?
- How can I build on who I am to become who I want to be?
- How can I build relationships with my family, school and community?

Grade 4 English/Language Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Reading (1.2)</p> <p>Writing (1.11)</p> <p>Speaking/ Listening/ Observing (1.3, 1.4, 1.12)</p> <p>Inquiry (1.1)</p> <p>Technology as Communication (1.16)</p> <p>Organize Information (1.10)</p> <p>Arts and Humanities (2.22, 2.24)</p> <p>Think and Solve Problems (5.1, 5.2)</p> <p>Connect and Integrate Knowledge (6.1, 6.3)</p>	<p>How has the building and restoration of homes affected Kentucky's history?</p>	<p>Students will</p> <p>Reading</p> <ul style="list-style-type: none"> • understand and respond to reading materials. • respond to authors' opinions. • employ reading strategies. <p>Writing</p> <ul style="list-style-type: none"> • apply writing-to-learn and writing-to-demonstrate-learning strategies. • use information from technology to produce writing. • write transactive pieces. • write literary pieces. • identify and apply characteristics of effective writing. <p>Speaking/Listening/Observing</p> <ul style="list-style-type: none"> • recognize purpose and effectiveness of messages. • prepare and deliver formal presentations. • apply listening, speaking, and observing skills. <p>Inquiry</p> <ul style="list-style-type: none"> • identify information and resources. • take notes from research. • use technology as research tool. <p>Technology as Communication</p> <ul style="list-style-type: none"> • use technology to access ideas and information. • explore technology as means of communication.

Grade 4 English/Language Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use Internet exploration, maps, brochures, and chambers of commerce information to identify historical homes in Kentucky. Create time lines showing when buildings were built. Place homes on state map, accurately showing location. • investigate significance of historic homes to their state. Develop questions to interview tour guides to determine what factors (e.g., available materials, occupants, wars) affected home building. Research why (e.g., important person's home, specific era representation) and how (e.g., local fund raising, historical society efforts) these homes have been preserved. Read brochures about these homes to determine facts and opinions and methods used to persuade people to visit them. Develop brochures for state welcome centers that describe homes (e.g., location, significance) or develop brochures for individual homes to be distributed at those homes. <p><i>Technology Suggestion: Script and produce audio or video public service announcements about Kentucky's historic homes.</i></p> <ul style="list-style-type: none"> • read materials about significant Kentucky homes (e.g., <i>Borrowed Children</i>, <i>Little Colonel</i>). Listen to songs that feature Kentucky homes (e.g., "My Old Kentucky Home," "Back Home in Kentucky"). Record in reading logs how homes were described by authors and songwriters, as well as emotions evoked by those settings. Rewrite songs by altering homes, changing tunes, or modernizing language. Participate in on-demand writing tasks about what it would have been like to live in one of these homes. • choose historical homes and use graphic organizers to compare to their homes. Read historical fiction (e.g., <i>When I was Young in the Mountains</i>). Use stories as models to construct historical fiction with themselves as characters. Write and perform plays of special event that occurred in same setting. • design and implement campaign to preserve homes important to their community. Interview descendants of residents or builders of homes to research events connected to homes. Research process to identify homes for preservation. Use journals and graphic organizers to take notes and organize information. Videotape homes as part of persuasive presentations to local historical group to save homes. 	<p>Svetlana moved from Romania to the U.S. four years ago. She has intermediate English skills. She needs support to understand verbal and written English. Her teacher uses scaffolding strategies. For example the language demands are reduced by providing her with a partially completed outline for developing questions to guide her research and develop brochures. She shares pictures of homes in Romania. A peer reviews her work and she conferences with the teacher (<i>Types of extensions: procedures and routines, level of support, resources and materials</i>).</p> <p>Shelly is working on strategies to help her connect prior knowledge with new information. Her teacher provides multiple models using "Think-Aloud-Strategies" by sharing analogies and creating mental images. Shelly uses a checklist to monitor her use of effective "Think-Aloud-Strategies" as she reads materials about significant Kentucky homes (<i>Types of extensions: purpose and appropriateness, procedures and routines, level of support, resources and materials, participation</i>).</p>

Grade 4 English/Language Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Reading (1.2)</p> <p>Writing (1.11)</p> <p>Speaking/ Listening/ Observing (1.3, 1.4, 1.12)</p> <p>Inquiry (1.1)</p> <p>Technology as Communication (1.16)</p> <p>Organize Information (1.10)</p> <p>Arts and Humanities (2.22, 2.24)</p> <p>Think and Solve Problems (5.1, 5.2, 5.3)</p> <p>Connect and Integrate Knowledge (6.1, 6.3)</p>	<p>How do people select homes to meet their needs?</p>	<p>Students will</p> <p>Reading</p> <ul style="list-style-type: none"> • understand and respond to reading materials. • utilize text features. • respond to authors' opinions. • employ reading strategies. • use contextual vocabulary. <p>Writing</p> <ul style="list-style-type: none"> • apply writing-to-learn and writing-to-demonstrate-learning strategies. • write transactive pieces. • write personal pieces. • identify and apply characteristics of effective writing. <p>Speaking/Listening/Observing</p> <ul style="list-style-type: none"> • recognize purpose and effectiveness. • prepare and deliver formal presentations. • apply listening, speaking, and observing skills. <p>Inquiry</p> <ul style="list-style-type: none"> • identify information and resources. • take notes from research. • use technology as research tool. <p>Technology as Communication</p> <ul style="list-style-type: none"> • use technology to access ideas and information. • explore technology as means of communication.

Grade 4 English/Language Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • identify needs for homes. Research different types of homes (e.g., single family, apartments, styles). Read and view periodical and electronic news accounts to investigate history and purposes of Habitat for Humanity and how they match home types and locations to prospective owners. Interview people about why they chose the type of home they have. Write news articles about process people go through to select homes appropriate to them. <p><i>Technology suggestion: Script and create TV news reports that trace process to build or purchase a new home.</i></p> <ul style="list-style-type: none"> • investigate how homes have changed over time. Compare costs of building then and now. Complete graphic organizers to compare features (e.g., wall and floor coverings) of homes of various time periods. Read historical fiction to determine how authors presented views of homes. Read science fiction about homes of the future to identify features and roles of homes. View futuristic representations of homes (e.g., <i>The Jetsons</i>, <i>Star Trek</i>, <i>Star Wars</i>, <i>Lost in Space</i>). Write prediction pieces about what type of home they expect to live in the future. Write science fiction stories or poems set in home of future. • write reflective journal entries about their ideal homes, based on criteria such as location, style, size, and features. Investigate requirements for home design. Create designs for their ideal homes. Deliver speeches describing choice, using visual aids or computer-generated graphics. Collaboratively design rubric for successful presentations and use for peer evaluations. • investigate different ways people sell homes (e.g., newspaper, phone, Internet, auction, TV, location flyers). Compare how different formats are organized using various text features. Analyze vocabulary that appeals to different audiences. Using this analysis, design ads to sell their own homes. Participate in on-demand writing that uses home descriptions to develop ads. 	<p>Ally, Tucker, Jawana, Chris, and David efficiently use word recognition strategies when reading. They have targeted goals in reading comprehension to increase their understanding of text. Their teacher uses a “Questioning the Author (QtA)” approach to help students become actively engaged in reading and increase understanding. He uses the three strategies of QtA, <i>queries</i>, <i>discussion</i>, “<i>moves</i>” (e.g., modeling, revoicing, and annotating, and teacher planning). The students use QtA while reading and reviewing news accounts (<i>Types of extensions: purpose and appropriateness, procedures and routines, order of learning, level of support</i>).</p> <p>Students with high abilities and interests in social studies will conduct research to determine factors considered in the selection of homes (e.g., economic, family size, design). They will create profiles of potential buyers for selected developments and interview developers about how these factors influence the development of communities. They present their findings to real estate agents (<i>Types of extensions: purpose and appropriateness, demonstration of knowledge, complexity, level of support</i>).</p>

Grade 4 English/Language Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Reading (1.2)</p> <p>Writing (1.11)</p> <p>Speaking/ Listening/ Observing (1.3, 1.4, 1.12)</p> <p>Inquiry (1.1)</p> <p>Technology as Communication (1.16)</p> <p>Arts and Humanities (2.22, 2.24)</p> <p>Think and Solve Problems (5.1, 5.2)</p> <p>Connect and Integrate Knowledge (6.1, 6.3)</p>	<p>How can build on who I am to become who I want to be?</p>	<p>Students will</p> <p>Reading</p> <ul style="list-style-type: none"> • understand and respond to reading materials. • understand characteristics and elements of different works. • select and read materials for enjoyment. • employ reading strategies. <p>Writing</p> <ul style="list-style-type: none"> • apply writing-to-learn and writing-to-demonstrate-learning strategies. • write transactive pieces. • write literary pieces. • write personal pieces. • identify and apply characteristics of effective writing. <p>Speaking/Listening/Observing</p> <ul style="list-style-type: none"> • apply listening, speaking, and observing skills. <p>Inquiry</p> <ul style="list-style-type: none"> • identify information and resources. • take notes from research. • use technology as research tool. <p>Technology as Communication</p> <ul style="list-style-type: none"> • explore technology as means of communication.

Grade 4 English/Language Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • look at pictures of how they have grown. Interview others about memories of students' childhoods to create time lines of their lives. Identify emotions they have felt in their lives. Connect emotions with events in their lives. Write personal narratives to communicate how they felt about specific events. • interview other people about how they view them now and what they expect for them. Use graphic organizers to compare others' perceptions to their own. Determine goals for future personal development. Devise plans that would allow them to accomplish goals. Present personal goals to class. Discuss common goals and plans. Create posters for school with positive character traits they are trying to build. <p><i>Technology suggestion: Use desktop publishing and drawing software to produce posters.</i></p> <ul style="list-style-type: none"> • choose persons who have had impact on them. Develop character maps identifying influential traits. Write memoirs explaining relationships. • read biographies of role models to identify what makes them successful. Compare personal character traits with role models to determine if they share traits that will help them be successful. Journal changes they will need to make to be successful. • read fiction that deals with problems young people face today. Create database of literature that identifies problems characters face. Write short stories or picture books in which characters overcome problems and improve their self-esteem. • choose persons or problems to investigate. Read different genres (e.g., news articles, fiction, biographies, advertising) about those people or problems. Use graphic organizers to show how facts and perceptions are presented in different genres. Choose types of writing they like most and select other materials in same genres to read for enjoyment. 	<p>Claris and Norene need additional practice in making predictions. As part of this activity they read "Counting on Frank" by Rod Clement (<i>Types of extensions: resources and materials</i>).</p> <p>Jason's current career goal is to be a journalist, however, he stays on task for short intervals and needs positive redirecting to stay focused. He gets along well with others and is very social. He asks many questions. Prior to interviewing people, he watches newscasts and reporters to observe how questions are constructed and the behaviors of journalists. He structures his interview, after the observed behaviors. To conduct his interviews, Jason tapes his questions first and then records the answers (<i>Types of extensions: complexity, magnitude, time, environment</i>).</p> <p>Toni has highly developed writing skills but requires assistance in the use of adaptive technology. She also needs additional time to complete reduced tasks to accommodate her poor fine motor skills. She writes short stories or picture books with characters who have special needs demonstrating positive self-esteem (<i>Types of extensions: resources and materials, magnitude, pace, environment, purpose and appropriateness</i>).</p>

Grade 4 English/Language Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Reading (1.2)</p> <p>Writing (1.11)</p> <p>Speaking/ Listening/ Observing (1.3, 1.4, 1.12)</p> <p>Inquiry (1.1)</p> <p>Technology as Communication (1.16)</p> <p>Organize Information (1.10)</p> <p>Arts and Humanities (2.22, 2.24)</p> <p>Think and Solve Problems (5.1, 5.2, 5.3)</p>	<p>How can I build relationships with my family, school, and community?</p>	<p>Students will</p> <p>Reading</p> <ul style="list-style-type: none"> • understand and respond to reading materials. • utilize text features. • respond to authors’ opinions. • employ reading strategies. • use contextual vocabulary. <p>Writing</p> <ul style="list-style-type: none"> • apply writing-to-learn and writing-to-demonstrate-learning strategies. • use information from technology to produce writing. • write transactive pieces. <p>Speaking/Listening/Observing</p> <ul style="list-style-type: none"> • prepare and deliver formal presentations. • apply listening, speaking, and observing skills. <p>Inquiry</p> <ul style="list-style-type: none"> • identify information and resources. • take notes from research. • use technology as research tool. <p>Technology as Communication</p> <ul style="list-style-type: none"> • use technology to access ideas and information. • explore technology as means of communication.

Grade 4 English/Language Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • interview adults about what they expect of them in their different relationships (e.g. family, school). Make lists of their responsibilities and compare lists with peers. Create charts of most common responsibilities for students their age. Read how-to articles. Use appropriate text features to prepare how-to articles or manuals about how to do tasks. Write and deliver speeches, using correct technical language, that demonstrate how to do tasks. • investigate volunteer services in their community. Interview volunteers to determine why and how they donate their time and services. Determine needs they could fulfill. Write resumes of their skills to convince community partners they are qualified to volunteer. Keep journals of volunteer experiences. • view television programs (e.g., <i>Andy Griffith Show</i>, <i>The Partridge Family</i>, <i>Leave It To Beaver</i>, <i>My Three Sons</i> ,<i>The Brady Bunch</i>) that show different family structures and relationships. Observe and chart how responsibilities are alike and different in each. • brainstorm how various family units (e.g., extended family in same household, single-parent homes) operate. Investigate various roles and responsibilities of family members. Read literature with different family structures. Compare responsibilities of those characters with personal lives. Journal home activities and post for classmates to compare in gallery walk. Role-play relationships of family members, demonstrating how roles and responsibilities change with family structures. <p>Technology suggestion: Videotape role-playing skits to show other classes for their study of family structures.</p> <ul style="list-style-type: none"> • investigate how rules are determined for school handbooks. Choose one school rule they would like to change. Investigate what it would take to make that change. Write proposals to make those changes and present to sbdm. • read newspaper accounts of changes proposed in their community. Predict effects of those changes. Write position statement letters to local officials about enacting proposed changes. 	<p>Patrick is working on following directions, social skills, and using assistive technology and picture maps prior to choosing a volunteer site. With a peer, Patrick will investigate volunteer requirements at local animal shelters and Kentucky Harvest. He constructs a resume using pictures to communicate his qualifications for volunteer work. He keeps a photo journal of his volunteer experiences (<i>Types of extensions: purpose and appropriateness, complexity, environment, level of support, resources and materials, participation, motivation, demonstration of knowledge</i>).</p> <p>Callie reads phonetically but does not comprehend the meaning. She doesn't use strategies to check for understanding. During reading instruction, she observes how Cora thinks aloud and asks herself questions about meaning. Callie's teacher coaches her on appropriate strategies (<i>Types of extensions: procedures and routines, purpose and appropriateness</i>).</p>

NOTES

Grade 5 English/Language Arts

Course Overview:

A thematic approach to fourth-grade language arts relates each of the five English/Language Arts strands: reading; writing; speaking, listening, observing; inquiry; and technology as communication to each other with activities. Students learn and practice communication skills through authentic tasks connected with broad concepts or themes.

The theme for this course is building and how building relates to students as individuals and members of larger groups. The concept of building as explored in literary works, periodicals, and social issues may refer to many processes. We build ourselves emotionally, physically, and mentally. Relationships, civilizations, and skills are built, as are physical structures. Students write and speak about what they have learned about building, as well as build on their skills and aptitudes to become better communicators and stronger thinkers.

The goal is to provide students with opportunities to learn about themselves and their world through communication while increasing their skills to communicate effectively with others.

Sample activities are intended to integrate multiple strands of communication. Activities include, for instance, inquiring about topics and then presenting that information in writing and speaking. Suggested activities are not comprehensive; that is, they are starting points to plan instruction for required content and may need to be adjusted for individual students and school situations.

Guiding Questions:

- What can I learn about buildings from their structure and design?
- How can I build healthy self-concepts in myself and others?
- What is my role in building responsibilities to my family, school, community, state, and country?

Grade 5 English/Language Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Reading (1.2)</p> <p>Writing (1.11)</p> <p>Speaking/ Listening/ Observing (1.3, 1.4, 1.12)</p> <p>Inquiry (1.1)</p> <p>Technology as Communication (1.16)</p> <p>Think and Solve Problems (5.1, 5.3)</p> <p>Connect and Integrate Knowledge (6.1, 6.3)</p>	<p>What can I learn about buildings from their structure and design?</p>	<p>Students will</p> <p>Reading</p> <ul style="list-style-type: none"> • employ reading strategies. • respond to variety of reading materials by summarizing. • use vocabulary and comprehension strategies. <p>Writing</p> <ul style="list-style-type: none"> • apply writing-to-learning and writing-to-demonstrate-learning strategies. • use information from technology to produce writing. • write transactive pieces. • apply characteristics of effective writing. <p>Speaking/Listening/Observing</p> <ul style="list-style-type: none"> • adjust communication based on audience. • prepare and deliver formal presentations. • use appropriate delivery techniques. • apply listening, speaking, and observing skills. <p>Inquiry</p> <ul style="list-style-type: none"> • develop questions to obtain ideas and information. • explore research tools to gather ideas and information. • identify sources by title and author. <p>Technology as Communication</p> <ul style="list-style-type: none"> • use technology to access information. • explore technology as means of communication.

Grade 5 English/Language Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • read biographies about architects (e.g., Mies van der Rohe, I.M. Pei, Frank Lloyd Wright). Prepare lists of questions to interview architects about basic components of design (e.g., purpose, occupants) and their profession (e.g., responsibilities, salary, preparation). Take notes. Summarize information from interviews and library media center research to create class job card files of architectural profession components. Use information to write feature articles about important aspects of architects' lives. Develop and administer career interest inventories for classmates based on what they learned about skills and attributes of architects. • identify needs for specific buildings in their community. Investigate building restrictions (e.g., zoning, costs, accessibility). Use research to write collaborative proposal for building and present to community groups. Plan campaigns to convince community of need to preserve historical buildings. Write editorials to increase awareness of needs and proposed solutions. Script and prepare public service announcements to support campaigns. Develop flyers to distribute at community meetings. • participate in walking tours to identify types of buildings in local community. Complete graphic organizers to compare purpose and design. Research various architectural styles used in community through Internet, historical records, and reference materials. Create time lines of buildings, including architectural styles and costs, documenting how styles were identified. Write articles for local historical society magazine that compare popularity of various architectural styles at different time periods in community's history. Develop script for tour guides that identify and describe architectural features of buildings. Use scripts to serve as historical society docents to guide tour groups. Prepare evaluations for tourists to evaluate effectiveness of presentations. Use evaluations to refine techniques of presentations. • use reading, research, and interviews to develop architectural dictionaries (e.g., vocabulary booklets) with definitions and illustrations of terms. <p><i>Technology suggestion: Use desktop publishing and drawing software to produce architectural dictionaries.</i></p>	<p>Erin and her peers develop questions for interviews with architects. Her communication device is pre-programmed with the interview questions. She depresses a sequence of keys on her communication device to conduct the interviews. One of her peers takes notes (<i>Types of extensions: complexity, procedures and routines, magnitude, environment, participation, level of support</i>).</p> <p>Tyler is a high achieving student. He gets along well with his peers but prefers to work alone on projects. He independently identifies needs for buildings, conducts research, and prepares proposals. He will develop charts and electronic presentations under the supervision of a city planner. Arrangements will be made so he can work independently without interruptions (<i>Types of extensions: complexity, time, pace, demonstration of knowledge, environment of learning</i>).</p> <p>Navy is a Khmer student who immigrated to the U.S. 18 months ago. He has beginning English reading and writing skills and intermediate speaking skills. He is artistic and enjoys working with technology. He will draw or find pictures of community architecture from his native country and show similarities and differences (<i>Types of extensions: level of support, resources and materials, procedures and routines, complexity, demonstration of knowledge, participation, motivation</i>).</p>

Grade 5 English/Language Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Reading (1.2)</p> <p>Writing (1.11)</p> <p>Speaking/ Listening/ Observing, (1.3, 1.4, 1.12)</p> <p>Inquiry (1.1)</p> <p>Technology as Communication (1.16)</p> <p>Organize Information (1.10)</p> <p>Arts and Humanities (2.22, 2.24, 2.25)</p> <p>Think and Solve Problems (5.1, 5.4)</p> <p>Connect and Integrate Knowledge (6.1, 6.3)</p>	<p>How can I build healthy self-concepts in myself and others?</p>	<p>Students will</p> <p>Reading</p> <ul style="list-style-type: none"> • identify meaning from reading materials. • recognize characteristics and elements of literary works. • select and read materials for enjoyment. <p>Writing</p> <ul style="list-style-type: none"> • write transactive pieces. • write literary pieces. • write personal pieces. • apply characteristics of effective writing. <p>Speaking/Listening/Observing</p> <ul style="list-style-type: none"> • adjust communication based on audience. • prepare and deliver formal presentations. • use appropriate delivery techniques. • apply listening, speaking, and observing strategies. <p>Inquiry</p> <ul style="list-style-type: none"> • develop questions to obtain ideas and information. • explore research tools to gather ideas and information. <p>Technology as Communication</p> <ul style="list-style-type: none"> • use technology to access information. • explore technology as means of communication.

Grade 5 English/Language Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> investigate how media manipulate images of people (e.g., computer-generated skinny people, touched-up photos, camera angles) in both advertising and periodicals. Brainstorm different sources of information about media campaigns (e.g., trade magazines, interviews). Create collaborative scrapbook of altered images that impact perceptions of what people should look and be like and project effects of such images on targeted audiences. Contact company representatives to identify why certain images are used to promote their products. Develop consumer guides to identify common misperceptions promoted by media. Write letters to marketing representatives about the impact of such images on today's youth. identify conflicts students have dealt with successfully in their lives. Develop personal narratives that describe conflicts and how they were overcome. View after-school specials and read TV scripts as models for writing. Script after-school specials in which characters overcome self-concept problems with peers' help. <p><i>Technology suggestions: Videotape productions in multiple locations. Add audio tracks.</i></p> <ul style="list-style-type: none"> develop schoolwide campaign to raise self-esteem. Organize "It's OK to Be Me" Day to show respect for individual differences. Write articles for school magazine that show positive aspects of classmates. Develop positive self-esteem posters (e.g., it's cool to... not smoke, do chores, be on academic team, talk to your parents). Report positive effects of campaign to school council, parent teacher organization, and local mental health group. begin reading novels in which characters have self-concept problems. Stop reading once problems are identified and predict how characters will deal with those problems. Confirm predictions in journals when reading is complete. Use plot maps to identify novel elements. Design improvement plans to help characters overcome problems. Present book talks to class recounting characters and their conflicts and suggestions to deal with conflicts. Select and read additional stories or nonfiction materials about people with similar conflicts. Write sequels in which characters have changed how they deal with their problems. 	<p>Madeline, Kimberly, Lulietta, Besnick, Logan, and Jerry are working on building their reading fluency. The teacher first presents mini-lessons on closed captioning and making predictions. The students watch the first captioned segment of an after-school special using sound and captioning. Then they watch the segment again without sound and read the captioning using choral reading. Using their learning logs, they make predictions (e.g., writing, illustrating) about what will come next in the program. They discuss their predictions in the group and then watch the second part of the video without sound and read the captions. They continue their discussions comparing their predictions to their new information. They write stories in their learning logs. They develop characters overcoming self-concept problems based on personal experiences (e.g., moving to a new country, city, or state, fear of war and violence, initiating conversations, fear of rejection) (<i>Types of extensions: resources and materials, level of support, order of learning</i>).</p> <p>Andrew is academically on grade level and is working on strategies to control his anger by replacing appropriate positive behaviors for his aggressive ones. The teacher facilitates Andrew's selection of literature that has characters who have similar experiences and who portray positive strategies to deal with adversity (<i>Type of extension: purpose and appropriateness</i>).</p>

Grade 5 English/Language Arts

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Reading (1.2)</p> <p>Writing (1.11)</p> <p>Speaking/ Listening/ Observing (1.3, 1.4, 1.12)</p> <p>Inquiry (1.1)</p> <p>Technology as Communication (1.16)</p> <p>Organize Information (1.10)</p> <p>Arts and Humanities (2.22, 2.24, 2.25)</p> <p>Think and Solve Problems (5.1, 5.3)</p> <p>Connect and Integrate Knowledge (6.1. 6.3)</p>	<p>What is my role in building responsibilities to my family, school, community, state, and country?</p>	<p>Students will</p> <p>Reading</p> <ul style="list-style-type: none"> • identify meaning from reading materials. • recognize characteristics and elements of literary works. • identify and apply information. • employ reading strategies. • respond to reading materials by summarizing. • use vocabulary and comprehension strategies. <p>Writing</p> <ul style="list-style-type: none"> • write transactive pieces. <p>Speaking/Listening/Observing</p> <ul style="list-style-type: none"> • adjust communication based on audience. • prepare and deliver formal presentations. • use appropriate delivery techniques. • apply listening, speaking, and observing skills. <p>Inquiry</p> <ul style="list-style-type: none"> • develop questions to obtain ideas and information. • explore research tools to gather ideas and information. <p>Technology as Communication</p> <ul style="list-style-type: none"> • use technology to access information. • explore technology as means of communication.

Grade 5 English/Language Arts

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • read U.S. Constitution to determine rights and responsibilities of individuals and governments. Construct Venn diagrams showing how rights and responsibilities of individuals, families, schools, communities, states, and U.S. are interrelated. Respond to open-response situation about personal and collective rights and responsibilities in democracies. • investigate laws that have been made because of specific efforts on the part of people or groups (e.g., recycling for Kentucky schools, Megan’s law). Identify situations that need legal action. Investigate reasons why action is needed. Research any precedents for such regulations. Read and summarize similar laws as models for writing their own. Write and present proposals for laws to the appropriate lawmaking group. Write campaign brochures to convince people to support enacting the law. Write editorials about needs for law. • interview veterans of national conflicts (e.g., Desert Storm, Vietnam). Also interview their family members. Investigate conflicts through Internet, field trips to monuments, viewing videos, and reading fiction and nonfiction accounts. Summarize information obtained. Compare perspectives and information presented in fictional and nonfictional accounts of war. Maintain vocabulary log with technical terms relating to war, military, and government. Write articles about how responsibility to national government can affect family members (e.g. how children were affected by parents’ service in Desert Storm). Write and illustrate stories of young children whose parent(s) are serving their country in wartime. • create miniature societies within classrooms. Read applicable school rules and regulations about developing this project. Develop mission statement and write necessary rules and regulations. Make presentation to decision-making body requesting money to fund project. Research roles in community. Write job descriptions. Write resumes to apply for jobs. Develop economic (e.g., taxes, supply and demand for materials), legal (e.g., courts, law enforcement officials), and service (e.g. elected officials, wellness centers) systems. Maintain reflective journal of difficulties and successes in school society. Research how these relate to those of larger societies. Write articles comparing actions and relationships of classroom society to larger community. 	<p>Laura learns at the same level and rate as her peers but needs large print or oral presentations of information. She also uses a computer voice to text to prepare her part of class presentations (<i>Types of extensions: purpose and appropriateness, procedures and routines, order of learning, resources and materials, level of support</i>).</p> <p>As Claire, Jerome, Anna, and Aviv learn new vocabulary, they need direct instruction and strategies for accessing meaning and connecting concepts to real-life contexts. Multiple meanings of words often cause them to misunderstand content being presented. They receive instruction on the use of the Concept Comparison Routine (University of Kansas Center for Research on Learning) to compare perspectives and information presented. To develop their vocabulary and concept knowledge, they are taught mnemonic strategies and the Clarifying Routine (University of Kansas Center for Research on Learning). They use the routines across content areas (<i>Types of extensions: procedures and routines, resources and materials, environment of learning, motivation, time</i>).</p>

English/Language Arts Glossary

Authentic: Real, genuine, and actual communications with real people (e.g., letters to editor of an actual newspaper).

Blending: Combining sounds to make words.

Classic texts: Literary or other works that have been canonized, either continuously or intermittently, over a period of time.

Concrete poetry: Poems shaped like objects they describe.

Contemporary texts: Literary or other works that have been written in recent years; they frequently address issues and events of current concern to a given community, but may also be broader in scope.

Context: Sounds, words, or phrases adjacent to a spoken or written language unit; social or cultural situation in which a spoken or written message occurs.

Conventions: Accepted practices in spoken or written communication (e.g., mechanics, formatting, grammar).

Correctness: Acceptable qualities in writing features such as spelling, punctuation, and capitalization.

Cues: Various sources of information used by readers to construct meaning, including relationships between oral and written language (graphophonic) and among linguistic units (syntactic) and language meaning systems (semantic).

Decode: To analyze spoken or graphic symbols of familiar languages to ascertain their intended meaning.

Delivery techniques: Ways materials are presented to audiences that includes both verbal and nonverbal elements.

Directionality: Patterns of reading text (e.g., left to right; top to bottom; front to back).

Expressive writing: Creation that reveals or explores authors' thoughts, feelings, and observations.

Environmental text: Printed language that appears in everyday situations (e.g., road signs, food labels, fast food signs).

Fiction: Imaginative literary, oral, or visual works representing invented, rather than actual, persons, places, and events.

Figurative language: Any language using figures of speech, such as metaphor or hyperbole to create multiple or intensified meanings.

Genre: Category used to classify literary and other works, usually by form, technique, or content (e.g., short stories, drama, poetry, novels, essays).

English/Language Arts Glossary

Imagery: Use of language to create sensory impressions; collectively, the figurative language in a work.

Informational material: Writing intended to share information with audiences (e.g., biographies, autobiographies, periodicals).

Inquiry: Investigations through a variety of sources.

Literary (story) elements: Components of expressive writing (e.g., characters, setting, conflict/resolution, theme, point of view).

Literary techniques: Strategies authors use to convey or enhance expressive writing (e.g., figurative language, foreshadowing, characterization).

Multimedia: Incorporating or making use of more than one medium. For instance, multimedia inquiry projects might include written reports, photographs, computer-generated charts, and audiotaped interviews.

Nonprint source: Resources that do not have written text (e.g., signs, speeches, electronic media, interviews).

Nonverbal elements: All aspects of oral communication other than word choice (e.g., gestures, facial expressions, tone, volume, rate).

Organizational signals/aids: Those included in print to help readers understand text (e.g., bullets, bold print, graphics, headings, lists, embedded visuals, graphs).

Personal writing: Writing that is based on personal experiences (e.g., personal narratives, memoirs, personal essays).

Persuasive writing: Writing that convinces others to believe or do something (e.g., editorials, articles, advertisements, essays, speeches).

Practical/workplace writing: Writing to help readers perform everyday tasks (e.g., warranties, recipes, forms, memoranda, consumer texts, manuals).

Reading strategies: Techniques to both decode text and enhance comprehension (e.g., word analysis, rereading, context clues, pre-reading, raising questions, predicting, drawing conclusions, skimming, scanning).

Reflective writing: Writing in which the author considers events or processes to evaluate what has been learned.

Segmenting: Dividing words into sounds.

Semantic: The meaning of words.

English/Language Arts Glossary

Speaking-to-demonstrate-learning: Oral communication that assesses learning (e.g., instructional conversations, cooperating groups).

Speaking-to-learn: Oral communication that aids in the learning process (e.g., thinking-aloud, questioning).

Story structure: Format of formal writing.

Style: Authors' use of language, its effects, and its appropriateness to the author's intent and theme.

Syllabification: Identifying or recognizing parts of words.

Syntax: Word structure relationships among linguistic units such as prefixes and suffixes.

Technology: Electronic and other devices used to enhance communication (e.g., videos, computers, TV, radio, telephone).

Text: Printed communications in their varied forms, oral communication, and visual communications such as films and computer displays.

Text features: Visual techniques that enhance readers' understanding of print, including organizational signals and aids.

Transactive: Writing produced for authentic purposes and audiences beyond completing an assignment to demonstrate learning.

Verbal elements: Choice of spoken language.

Writing Process: The many aspects of the complex act of producing written communication; specifically, planning, drafting, revising, editing, and publishing.

Writing-to-demonstrate-learning: Writing that assesses learning (e.g., open response, essay tests).

Writing-to-learn: Writing that aids in the learning process (learning logs, journals, notetaking, reflective response).

Grades 4 and 5 English/Language Arts Student Resources

Adams, Patricia. *The Helping Hands Handbook: A Guide for Kids Who Want to Help People, Animals, and the World We Live In*

Allen, Jonathan. *Mucky Moose*

Baylor, Byrd. *Guess Whom My Favorite Person Is?*

Baylor, Byrd. *The Way to Start a Day*

Berry, Pearlleen. *Grandpa Says: Superstitions & Sayings of Eastern Kentucky*

Blegvad, Lenore. *Anna Banana and Me*

Bradman, Tony. *Michael*

Brandt, Keith. *Daniel Boone: Frontier Adventures*

Brown, Dottie. *Kentucky*

Chambers, Catherine E. *Daniel Boone and the Wilderness Road*

Cohen, Miriam. *Best Friends*

Cooper, Melrose. *I Got Community*

Dorros, Arthur. *This is My House*

Fenner, Carol. *Randall's Wall*

Fox, Meredith. *Families*

Fox, Paula. *The Stone-Faced Boy*

Fradin, Dennis Brendell. *Kentucky (From Sea to Shining Sea)*

Galbraith, Kathryn. *Roommates and Rachel*

Goodall, John S. *The Story of a Farm*

Goodall, John S. *The Story of an English Village*

Goodall, John S. *The Story of Main Street*

Gravell, Karen. *Growing Up in a Holler in the Mountains: An Appalachian Childhood*

Greene, Carol. *Daniel Boone: Man of the Forest*

Heine, Helme. *Friends*

Heine, Helme. *The Pig's Wedding*

Hines, Jane B. *Kentucky Boy*

Holmes, Mary Z. *Year of the Sevens*

Howe, James. *I Wish I Were a Butterfly*

Howe, James. *There's a Monster Under my Bed*

Isdora, Rachel. *City Seen From A to Z*

James, Alan. *Homes in Cold Places*

Johnston, Annie Fellows. *The Little Colonel*

Komaiko, Leah. *I Like the Music*

Lawlor, Laurie. *Daniel Boone*

Le Shan, Eda. *What Makes me Feel This Way?*

Levinson, Riki. *Dinnieabbiesister-r-r*

Lewis, Barbara A. *The Kid's Guide to Service Projects*

Lindgren, Astrid. *Lotta on Troublemaker Street*

Luttrell, Wanda. *Home on Stoney Creek*

Luttrell, Wanda. *Reunion in Kentucky*

Lyon, George. *Borrowed Children*

Lyon, George Ella. *Counting On The Woods: A Poem*

Lyon, George Ella. *Mama Was a Coal Miner*

Lyon, George Ella. *Who Came Down the Road*

Mark, Bonnie S. *I'll Know What to Do: A Kid's Guide to Natural Disaster*

Grades 4 and 5 English/Language Arts Student Resources

Marsh, Carole. *Kentucky Ghost Tales*
Marston, Hope Irvin. *Isaac Johnson: From Slave to Stonecutter*
McKinnon, Elizabeth. *Learning and Caring About Our Town; Activities For Helping Children
Learn And Care About Their Community*
McNair, Sylvia. *Kentucky (America the Beautiful)*
Moore, Elizabeth. *Let's Explore Kentucky*
Raskin, Ellen. *Nothing Ever Happens on my Block*
Rice, James. *Gaston Goes to the Kentucky Derby*
Rockwell, Ann. *The Storm*
Roe, Eileen. *All I Am*
Rylant, Cynthia. *When I Was Young in the Mountains*
Sanford, William R. *Daniel Boone: Wilderness Pioneer*
Seltzer, Isadore. *The House I Live In: At Home in America*
Shiver, Lee. *Going to the Wildcat Game*
Simon, Norma. *All Kinds of Families*
Smith, Adam, and Katherine Snow Smith. *A Historical Album of Kentucky*
Snelling, Lauraine. *Kentucky Dreamer*
Spier, Peter. *People*
Spinelli, Eileen. *Somebody Loves You, Mr. Hatch*
Spurr, Elizabeth. *Mrs. Minetta's Car Pool*
Stuart, Jesse H. *Andy Finds a Way*
Stuart, Jesse H. *Hie to the Hunter*
Stuart, Jesse H. *Jesse Stuart Reader*
Taylor, Barbara. *Maps and Mapping*
Thompson, Kathleen. *Kentucky (Portrait of America)*
Tusa, Tricia. *Sherman and Pearl*
Tusa, Tricia. *Stay Away From the Junkyard!*
Vision Group. *Color Me Kentucky*
Walker, Les. *Housebuilding for Children*
Weitzman, David. *My Backyard History Book*
Wells, Rosemary. *Mary on Horseback: Three Mountain Stories*
Wilkie, Katherine E. *Daniel Boone: Taming the Wilds*
Wilkinson, Phillip. *Amazing Buildings*
Wilkinson, Phillip. *Building*
Wilson, Forest. *What It Feels Like to be a Building*
Wood, Tim. *Ancient Wonders*
Young, Caroline. *Castles, Pyramids, & Palaces*

Web sites

CUBE (Center for Understanding the Built Environment)
<http://www.cubekc.org>

Do Something
<http://www.dosomething.org>

Grades 4 and 5 English/Language Arts Student Resources

FreeZone

<http://www.freezone.com>

Great American Web site

<http://www.uncle.sam.com>

Kid's Web

<http://www.npac.syr.edu/textbook/kidsweb>

Map Quest

<http://www.mapquest.com>

Smithsonian Institute Office

<http://www.si.edu>

The KidsCom Company

<http://www.widscom.com>

The Surfin' Librarian Department

<http://www.cyberschoolmag.com>

U.S. Gazetteer

<http://www.census.gov/cgi-bin/gazetteer>

World Kids Network

<http://www.worldkids.net>

Health Education

Grade 4 Health Education

Course Overview:

Students in intermediate health education focus on good nutrition, health and safety practices, decision-making skills, disease prevention, and the benefits of exercise. Other topics include identification of community resources, prevention of violence, and avoidance of substance abuse.

Intermediate health education builds upon the knowledge, skills, and practices learned in the primary health education program. Continued acquisition of health knowledge enables students to make smooth transitions to the middle grades and prepares them to assume more responsibility for their own health.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- How does being responsible, demonstrating respect for others, and goal setting contribute to my well-being?
- How will knowledge of media advertising techniques help me make wise consumer decisions?
- How will knowledge of sound health, safety, and nutritional practices contribute to my personal wellness?
- How will participation in stress-reducing activities and using good decision-making skills contribute to my mental wellness?
- What healthcare agencies and services are available in my community?

Grade 4 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Individual Well-Being (2.29)</p>	<p>How does being responsible, demonstrating respect for others, and goal setting contribute to my well-being?</p>	<p>Students will</p> <ul style="list-style-type: none"> • explain and exhibit responsibility to oneself. • describe and practice responsibility to others. • examine the role of rules for the effective functioning of groups. • distinguish between goal setting and achievement. • recognize that physical, emotional, and social changes are a normal part of growth and development. • explain how individuals and groups are interdependent. • explore strategies for dealing with conflict and anger.

Grade 4 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • write stories about family members and their responsibilities toward each other. Share with class members. • select personal goals. Outline steps to reach personal goals. Share ideas with class. • observe infants, toddlers and elementary students. Record observations of emotional, social, and growth patterns in learning logs. • role-play conflict resolution strategies. • explore various family structures (e.g., single parent, foster parent, grandparent, two parent). List names of popular family television shows (e.g., Lucy, Leave it to Beaver, Cosby). Analyze families and develop roles and responsibilities of family members. Discuss with class roles and responsibilities of each member. • bring old and current family photographs to class. Describe how family relationships change as members age and new members are added. Create illustrated storybooks to demonstrate changes. • record in learning logs the number of hours their family spends together in one week. Specify activities family engage in during this time. Analyze findings and develop plans or schedules that may improve quality and quantity of time spent with family. Compare quality and quantity of time spent together, before and after implementation of plans. • choose specific improvement goals (e.g., punctuality, politeness). Make flow charts showing short-term goals they would use to meet chosen long-term goal. Present to class. Use steps for goal setting to write songs explaining how to achieve goals. Use familiar tunes for lyrics and teach goals to classmates. • explore strategies used to resolve conflicts. Make posters demonstrating conflict resolution strategies. Display posters throughout school. Role-play conflict resolution strategies for given scenarios. 	<p>Adrian and Vanessa enjoy choosing their own books to read and are interested in science, travel, and sports. They are emerging writers with many ideas, however, they do not use efficient planning strategies to develop ideas and organize their thoughts. For prewriting, the students brainstorm personal examples of responsibility, and goal setting, observing examples in TV programs and books. They interview family members and chart responsibilities, examples of respect, and goals. The teacher models how to use storyboarding as a prewriting strategy. Adrian and Vanessa use storyboards to conceptualize, and organize their writing. After completing their storyboards, they conference with peers and their teacher (<i>Types of extensions: order of learning, procedures and routines, resources and materials, level of support, participation, motivation, demonstration of knowledge</i>).</p> <p>Neil is expressive and active. He is working on goals to reduce aggressive and impulsive behaviors. He receives instruction on positive replacement behaviors. Neil e-mails three businesses and requests information about positive employee behaviors. He develops flow charts and makes posters illustrating how to achieve personal goals. He receives feedback based on his behavior contracts (<i>Types of extensions: order of learning, complexity, time, procedures and routines, environment of learning, level of support, motivation, participation</i>).</p>

Grade 4 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Consumer Decisions (2.30)</p>	<p>How will knowledge of media advertising techniques help me make wise consumer decisions?</p>	<p>Students will</p> <ul style="list-style-type: none"> • evaluate media and advertising techniques. • describe the differences between needs and wants. • determine ways in which goods and services used by families impact the environment. • select planning and saving strategies for specific purchases.

Grade 4 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • investigate techniques advertisers use to convince people to buy products. Use information to create bulletin boards displaying techniques. • identify favorite commercials. Describe in learning logs appealing features of commercials and products. Use information to produce commercials. • determine items for class purchases. Design and implement plans to earn money for purchases. 	<p>Noah uses low vision devices to obtain visual information. In order to explain to others what his visual needs are, Noah is taught self-advocacy skills in preparation for more independent self-directed learning. Noah accesses large-print newspapers using technology to investigate various advertising techniques. He uses a cue card containing characteristics of various advertising techniques he has researched. He uses the cue card to identify the advertising techniques. He creates a bulletin board displaying techniques labeled and clustered according to most effective and least effective (<i>Types of extensions: resources and materials, routines and procedures, level of support</i>).</p>

Grade 4 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Personal Wellness (2.31)</p>	<p>How will knowledge of sound health, safety, and nutritional practices contribute to my personal wellness?</p>	<p>Students will</p> <ul style="list-style-type: none"> • identify and practice good personal health habits. • use good health habits that prevent the spread of diseases. • follow school safety procedures. • adhere to traffic safety rules. • use personal safety strategies. • demonstrate procedures for basic emergency assistance. • use food guide pyramid to identify food groups and appropriate servings as well as to plan nutritious snacks. • recognize how food affects physical growth and development.

Grade 4 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • explore ways to prevent spread of germs and tooth decay. Create posters showing ways to reduce spread of germs and tooth decay. Display throughout school. • design brochures displaying safety practices for home, school, bus, and recreational areas. Brainstorm possible authentic audiences and purposes for brochures. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> <p>Technology suggestion: <i>Use desktop publishing to produce brochures.</i></p> <ul style="list-style-type: none"> • listen to Emergency Medical Technician explain procedures for emergency assistance. Record procedures in learning logs. • prepare bulletin boards of food guide pyramid. In graphic organizers, describe how each nutrient group contributes to growth and development. 	<p>Eduardo is from Brazil and has English language skills. He is working on targeted health related survival vocabulary, concepts and signs. With peers and his teacher, Eduardo locates examples of the health related vocabulary, concepts and signs in school, outside, and in the community. He uses picture models paired with the English words to match to examples. He also looks in magazines for additional examples and clips them out. He makes a safety brochure using his examples and models to share with his family and children who immigrate from other countries. The Student Leaders in Technology Program works with Eduardo to place his brochures on the school web site. He uses the new vocabulary to explain two safety practices to a peer (<i>Types of extensions: order of learning, complexity, time, procedures and routines, resources and materials, participation, environment of learning, motivation, demonstration of knowledge</i>).</p>

Grade 4 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Mental Wellness (2.32)</p>	<p>How will participation in stress-reducing activities and using good decision-making skills contribute to my mental wellness?</p>	<p>Students will</p> <ul style="list-style-type: none"> • examine positive and negative consequences of choices. • identify purposes and proper use of medications. • identify nonmedical drugs and the risks of taking such drugs. • analyze situations that cause stress and develop ways to manage stress. • develop an awareness of personal rights and responsibilities. • develop decision-making strategies.

Grade 4 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use skits to demonstrate positive and negative consequences of choices. Highlight decision-making strategies. • identify situations that cause stress. Explore and implement ways to reducing stress. Design how-to manuals describing stress reducing techniques for classmates (<i>WP-Transactive</i>). • explore difference between rights and responsibility. Prepare list of activities in graphic organizers for each. 	<p>Lucas likes predictability, routine, needs support to generalize information to new situations, use language for communication and social purposes, and making choices. Groups of more than three are stressful for him. He uses an alternative communication system (e.g., picture cards, communication board, hand signals, sign language). As part of the class routine, the teacher makes sure Lucas initially is placed in groups of no more than three for group activities. She teaches students in the class how to communicate with Lucas. She teaches specific interaction skills to Lucas as he works in his small group to develop a skit. Targeted behaviors for Lucas include respecting personal space and using appropriate language to communicate his choices. Lucas' role in the skit is to demonstrate the positive and negative consequences of choices related to targeted behaviors. Lucas rehearses his role in the skit. The teacher and peers provide prompting as needed which is gradually faded with time. He uses these skills in a variety of mature settings for generalization (<i>Types of extensions: order of learning, complexity, pace, procedures and routines, environment of learning, participation, demonstration of knowledge, motivation, resources and materials</i>).</p> <p>Jim's reading instruction is focused on developing his fluency and comprehension. To help Jim keep up with his classmates, he works with his teacher and selects shorter reading and writing assignments. He uses the reading selection on ways to reduce stress for repeated reading to build increase his fluency. Jim uses cards containing key questions related to his reading selections to focus his reading. He is directly taught notetaking skills to identify key information to include in his how-to-manual on strategies for reducing stress. Since reading situations cause Jim personal stress, he investigates and includes strategies in his how-to-manual on ways to reduce stress when reading (<i>Types of extensions: purpose and appropriateness, magnitude, pace, procedures and routines</i>).</p>

Grade 4 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Community Services (2.33)</p>	<p>What healthcare agencies and services are available in my community?</p>	<p>Students will</p> <ul style="list-style-type: none"> • identify roles and responsibilities of healthcare workers in schools and communities. • access community-sponsored agencies that maintain and promote health and safety. • identify agencies that protect the environment.

Grade 4 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • classify local healthcare agencies and providers by type (e.g., health department, hospital, prenatal clinic). Compile directories for community distribution. • listen to community agency workers discuss health and safety procedures. Summarize information in learning logs. • tour agencies that protect community health (e.g., water treatment plant, sewage treatment facility). Examine examples of consumer guides and discuss their characteristics. Discuss audience for consumer guides. Prepare consumer guides reflecting how the community is served by these agencies (<i>WP-Transactive</i>). 	<p>Mandy has shown an interest in health-related careers. She reads well above the level of her same-age peers. Mandy will work with the gifted and talented coordinator who will help her contact doctors, therapists, and other healthcare workers to interview. She will record her interviews on audiotapes and produce a radio broadcast about healthcare in her community (<i>Types of extensions: motivation, magnitude, complexity, purpose and appropriateness</i>).</p>

NOTES

Grade 5 Health Education

Course Overview:

Students in the fifth-grade health education continue focusing on good nutrition, decision-making skills, disease prevention, and benefits of exercise. Community resources, health and safety practices, prevention of violence and substance abuse are other focal points.

The fifth-grade health education program will help students make a smooth transition to middle grades and prepare them to assume greater responsibility for maintaining their own physical, mental, and social health.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- What are some positive things I can do to improve my individual well-being?
- How will planning and saving strategies influence consumer decisions I make?
- How does safety, diet, exercise, and rest contribute to my personal wellness?
- What positive actions can I take to enhance my mental wellness?
- How can I benefit from government services in my community?

Grade 5 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Individual Well-Being (2.29)</p>	<p>What are some positive things I can do to improve my individual well-being?</p>	<p>Students will</p> <ul style="list-style-type: none"> • demonstrate responsibility to oneself and others. • apply rules in groups and determine how their application enables groups to function effectively. • demonstrate how individuals and groups are interdependent. • determine unsafe or threatening situations and procedures for dealing with them. • apply conflict resolution strategies.

Grade 5 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create and perform skits demonstrating rights and responsibilities within groups. • read articles describing safe and unsafe situations. Record actions that led to both safe and unsafe circumstances. • write stories portraying real-life conflicts and ways to resolve the problems. Use stories to teach younger students conflict-resolution strategies. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> 	<p>John has difficulty following rules. He insists on doing his own thing. In order to help John to become a more cooperative group member and improve group cohesion, provide John with a point sheet to maintain a record of positive and negative behaviors. Provide him with a reward when he demonstrates positive behaviors <i>(Types of extensions: level of support, participation, motivation).</i></p>

Grade 5 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Consumer Decisions (2.30)</p>	<p>How will planning and saving strategies influence consumer decisions I make?</p>	<p>Students will</p> <ul style="list-style-type: none"> • analyze differences between needs and wants and provide examples. • apply decision-making strategies when buying products based on price, features, and quality. • practice planning and saving strategies for specific purchases.

Grade 5 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • write skits incorporating decision-making strategies used when purchasing various items. • select products meeting personal needs or wants. Share with class reasons why they would purchase products. Design and implement money saving strategies used to make purchases. 	<p>Curtis frequently makes poor consumer decisions. He is impressed by his classmates ability to make better decisions. Place Curtis in a discussion group to allow him to learn decision-making strategies from peers (<i>Types of extensions: purpose and appropriateness, complexity, level of support</i>).</p>

Grade 5 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Personal Wellness (2.31)</p>	<p>How does safety, diet, exercise, and rest contribute to my personal wellness?</p>	<p>Students will</p> <ul style="list-style-type: none"> • describe the impact of diet, exercise, and rest on health and disease prevention. • practice good health habits and determine how they affect self and others. • describe how good nutrition helps develop healthy individuals. • examine food guide pyramid to determine appropriate servings and plan simple menus. • identify health and safety hazards at home, school, and play. • describe safe traffic/transportation practices. • explain and exhibit personal safety strategies. • demonstrate procedures for basic emergency assistance.

Grade 5 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • establish realistic personal wellness goals incorporating diet, exercise, and rest. • create collages of good health practices for display on bulletin boards in school hallways. • create safe transportation and personal safety brochures for other students (<i>WP-Transactive</i>). • create skits demonstrating basic emergency assistance techniques. • observe possible hazards in their home and school. Develop strategies to eliminate hazards. Create posters for schools displaying strategies and encouraging others to implement safety practices. 	<p>Will is in the gifted and talented program at school. He is behind his classmates in physical development and skill performance, and he does not enjoy participating in physical education classes. The teacher will assist Will in establishing reasonable skills and fitness goals. The teacher will arrange for Will to work with and teach skills he has mastered to younger children (<i>Types of extensions: purpose and appropriateness, complexity, magnitude, order of learning, level of support, motivation</i>).</p>

Grade 5 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Mental Wellness (2.32)</p>	<p>What positive actions can I take to enhance my mental wellness?</p>	<p>Students will</p> <ul style="list-style-type: none"> • analyze positive and negative consequences of choices and actions. • examine purposes and proper uses of medicines. • examine risks associated with the use of nonmedical drugs. • apply stress management strategies.

Grade 5 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • select situations (e.g., disagreement, misunderstanding) that may result in conflicts. Write stories describing possible consequences of positive and negative reactions. • prepare brochures on proper uses of medicines and risks of non-medicinal drugs. Display at local pharmacies or school nurses' stations (<i>WP-Transactive</i>). • brainstorm causes of stress. Implement strategies to reduce stress. 	<p>Elena moved to the United States from Costa Rica last year. She is fluent in Spanish and continues to speak it at home. Most of her English communication is at school. Her conversational English is at an intermediate level while her reading and writing are at a beginning level. Concepts, such as conflict, are presented using semantic maps. The teacher provides Elena with an electronic bilingual dictionary. In addition, Elena uses software that teachers concepts in Spanish (<i>Types of extensions: resources and materials, procedures and routines, level of support</i>).</p>

Grade 5 Health Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Community Services (2.33)</p>	<p>How can I benefit from government services in my community?</p>	<p>Students will</p> <ul style="list-style-type: none"> • identify governmental health and safety regulations. • describe and access health and safety services that agencies provide to the community. • identify community guidelines that promote healthy environments.

Grade 5 Health Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • interview school cafeteria manager about health and safety regulations. Implement plans to assist cafeteria manager in maintaining safety and sanitary standards. • use community resources (e.g., health department, fire department, police officers) to organize school wide health and safety clinic. • write articles for school newspapers describing community guidelines that promote a healthy environment (<i>WP-Transactive</i>). 	

Health Education Glossary

Acquired Immune Deficiency Syndrome (AIDS): The most deadly of the sexually transmitted diseases.

Addiction: Physical dependence; a condition in which the body becomes adjusted to a drug and requires the drug to function normally.

Adolescence: The period from about age 12 to 19 during which a child changes gradually into an adult.

Aggressive: Acting in a forceful, threatening, or disrespectful manner.

Alcoholism: An incurable disease in which a person becomes physically and psychologically dependent on the substance of alcohol.

Alzheimer's Disease: A type of dementia marked by forgetfulness, mental confusion, and helplessness.

Amphetamines: Synthetic stimulants that are available only by prescription.

Anabolic Steroid: A drug used to boost muscle size and raise tolerance to pain.

Anaerobic exercise: Intense physical activity lasting only a few seconds to a few minutes.

Antibiotics: Substances that are able to inhibit or kill bacteria.

Assault: An unlawful attempt or threat to harm someone.

Assertive: Able to stand up for yourself and to express your feelings in a way that does not threaten other people or make you anxious.

Biodegradable wastes: Wastes that can be broken down in the environment.

Blood Alcohol Concentration (BAC): A way to express the amount of alcohol in a person's body.

Blood pressure: The force of blood against the walls of arteries and veins.

Bulimia: An eating disorder in which a person goes on eating binges followed by purging or getting rid of food.

Cardiopulmonary Resuscitation (CPR): A combination of chest compression and rescue breathing used to maintain the flow of oxygen-rich blood to the brain while the heart is not working.

Central Nervous System (CNS): The brain and the spinal cord.

Health Education Glossary

Chancere: A small, painless sore that appears in the first stage of syphilis.

Chlamydia: A common sexually transmitted disease, which, if untreated, can cause serious, painful infections of the urinary tract in men and infections of the reproductive organs in women.

Cholesterol: A waxy, fat-like substance found in the cells of all animals.

Chromosomes: Tiny structures, found in almost every cell, that carry information about inherited characteristics.

Compensation: Making up for weakness in one area by excelling in another area.

Consumer: Anyone who buys goods and services.

Controlled substance: A drug that is limited by law because its use can cause dependence.

Defense Mechanisms: Coping strategies; ways people defend themselves against negative emotions.

Dependence: A state in which a person becomes incapable of controlling drug use.

Depressants: Drugs used to slow down the body's functions.

Dosage: The proper amount of a drug.

Endocrine glands: Organs that release chemicals directly into the bloodstream.

Extended Family: A network of close relatives that might include aunts, cousins, and grandparents.

Fertilization: Conception; the joining of a sperm cell with an egg cell.

First Aid: The immediate care given in an accident or sudden illness before professional medical help arrives.

First-degree burn: Surface burns in which the outer layer of the skin is reddened and painful.

Flexibility: The ability to use a muscle throughout its entire range of motion.

Foster Parents: Parents who take care of children when biological parents are unable to do so.

Fracture: A break or crack in a bone.

Goal: A result you want to achieve.

Health Education Glossary

Health Maintenance Organization (HMO): A group of doctors and allied health workers who provide complete medical services to individuals who are members of the HMO.

Heimlich maneuver: A technique that uses abdominal thrusts to dislodge an object blocking a person's airway.

High blood pressure: Hypertension; a condition in which there is higher than normal pressure on the walls of the blood vessels.

Isokinetic exercise: Exercise that makes use of weight-training machines to move muscles at a constant rate of speed throughout their full range of movement.

Isometric exercise: Exercise in which a muscle contracts but does not shorten. This type of exercise increases strength but only at the joint angle at which the exercise is performed.

Isotonic exercise: The contraction and relaxation of muscles through their full range of motion. This type of exercise develops muscle strength.

Life style: The way you choose to live your life.

Metabolism: The chemical reactions that change a substance, such as food, so that it can be used or removed from the body.

Muscular endurance: The ability of a muscle or a group of muscles to apply force over a period of time.

Muscular strength: The ability of a muscle to exert or to resist a force.

Natural food: A food that contains no additives.

Peer pressure: The need to conform to the expectations of friends and classmates.

Physical examination: A head-to-toe check of the body to identify medical problems.

Physical fitness: The ability of the heart, blood vessels, lungs, and muscles to work together to meet the body's needs.

Pituitary gland: The "master gland"; a small gland at the base of the brain that controls other endocrine glands and many activities, including growth, cellular metabolism, and reproduction.

Plyometric: Those activities that produce an overload of isometric type of muscle action which invokes the stretch reflex in muscles.

Primary-care physician: The doctor who takes care of most of your routine medical needs.

Health Education Glossary

Risk behavior: Behavior that increases chances of a harmful outcome.

Self-concept: The physical and mental picture you have of yourself.

Self-esteem: How much one likes oneself and feels good about oneself.

Sexual abstinence: Not having any kind of sexual contact with another person.

Sexually Transmitted Diseases (STDs): Venereal diseases; a group of diseases usually spread through sexual contact.

Shock: A condition in which an individual's circulation and breathing progressively slow down.

Sphygmomanometer: Instrument used to measure blood pressure.

Stress: A reaction of the body and mind to the demands of everyday life.

Stroke: A clot in a blood vessel in the brain that disrupts blood flow to the brain.

Tolerance: Resistance to a drug.

Unit Price: The cost per ounce of a product.

Values: Beliefs that are important to people and help them to clarify what they believe is right or wrong.

Viruses: Microscopic germs that cause disease; the simplest type of parasite.

Vital statistics: The number of births and deaths in a community.

Vitamins: Nutrients that assist many of the chemical reactions in the body.

Wellness: A concept of health that includes physical health, mental health, and social health.

Mathematics

Grade 4 Mathematics

Course Overview:

The grade 4 mathematics course emphasizes working with numbers and place value, unit fractions, and estimation procedures. Students explore structure of figures, similarity and congruence, and work with area and perimeter. Students use probability and data. They explore variables and solve questions using variables and formulate rules for patterns and plot on number lines. Students are actively engaged using concrete materials and appropriate technologies such as clocks, angle measures, fraction bar or strips, calculators and computer software.

Models are organized around guiding questions. Guiding questions (in bold print) direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Essential questions are included to further focus student learning.

Pages of models are arranged in pairs. On the left-hand page of each pair are guiding and essential questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Number and Computation

Guiding and Essential Questions:

What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?

- How big do numbers get?
- How do you represent parts of a whole?
- How do you combine whole numbers?
- How do you combine fractions?

Geometry and Measurement

Guiding and Essential Questions:

How do you interpret the world in a spatial sense? How do you analyze shapes in your world? How do you measure attributes of objects in your world?

- How do you tell how shapes are different from each other?
- How do you measure important characteristics of objects (e.g., time, temperature, area and perimeter of shapes)?

Grade 4 Mathematics

Probability and Statistics

Guiding and Essential Questions:

How do you ask questions about your world? How do you collect, organize, and interpret data about your questions, and how do you communicate information and make predictions relative to your data?

- How do you show data appropriately?
- How do you use probability experiments?

Algebraic Ideas

Guiding and Essential Questions:

How do you use mathematics in patterns, relationships, and functions to model and solve problems?

- How do you express rules for number relationships?
- How do you organize patterns and relationships?

Grade 4 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Numbers, Integers, & Place Value (2.7, 2.8, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How big do numbers get?</p>	<p>Students will</p> <ul style="list-style-type: none"> • read, write, and model whole numbers from 0 to 1,000,000, developing place value for hundred thousands and millions. • order and compare numbers to 1,000,000. • understand relative magnitude of whole numbers to 1,000,000. • determine factors/multiples of a whole number.

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use their knowledge of numbers and place value in mental arithmetic. Start with a number such as 500. Place 6 numbers on a cube, roll the cube and decide whether to add, subtract, multiply, or divide the last number with the rolled number to reach a goal number, such as 1000 or 0. See <i>Number Sense and Operations, Fourth-Grade Book, National Council of Teachers of Mathematics (NCTM) Addenda Series, Grades K-6</i> activity Make it More, Make it Less, p. 41 • discover different ways to represent a given number and reinforce the order of operations. Use four digits, such as the day's date, and rearrange the digits with choices of operations to represent a chosen target number. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Dateline, pp. 41-42 • state a question for which the given number is the answer. Record questions on paper. Have parents add to the list of questions on parents night. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity If the answer is 36, what is the question?, pp. 13-14 <p>Technology suggestion: Use calculators to check answers.</p>	<p>Marcus is working with adding and subtracting smaller numbers. For this activity he decides whether to add or subtract the last number with the rolled number to reach a goal of 100 or 0. He uses an extended place value chart to record his answers. He overgeneralizes when to use a specific strategy (e.g., count-on) and applies it to all addition problems when other strategies would be more efficient. As part of this activity, he identifies/matches which strategy to use to solve the problem and verbalizes why he chose the specific strategy. To increase his rate of responses, the teacher uses timed probes (e.g., 1 or 2 minutes). To reinforce his learning, he creates word problems with his partner based on an area of interest (e.g., purchasing books, clothes or video games; calculating temperature changes; trading baseball cards) (<i>Type of extension: order of learning complexity, time, procedures and routines, motivation, demonstration of knowledge, resources and materials</i>).</p> <p>A cluster of students who have demonstrated mastery of much of the materials on integers and place value will design a simulation or game for reinforcing order of operations (<i>Types of extensions: purpose and appropriateness, complexity, time, magnitude, resources and materials, demonstration of knowledge</i>).</p>

Grade 4 Mathematics

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Fractions & Decimals (2.7, 2.8, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How do you represent parts of a whole?</p>	<p>Students will</p> <ul style="list-style-type: none"> • compare unit fractions (e.g., numerator of 1) using manipulatives. • investigate multiple representations of equivalent fractions (e.g., $1/2=3/6$) with manipulatives. • read, write, and identify decimals through one-thousandths with manipulatives. • develop equivalent relationships between common fractions, decimals, and whole numbers (e.g., $1/2=0.5$, $4/2=2$, $2=2.0$). • explore appropriate estimation procedures.

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • apply their knowledge of fractions at concrete and pictorial levels in a creative situation, folding paper and creating quilt designs. Explain in learning logs how designs were created. Mount all squares on a wall forming “quilt.” Enlarge quilt patterns, copy onto dot paper. Color designs and express fractional parts. Compare graphs for square that has highest fractional part colored a specific color. Identify types of symmetry found in sections of the patterns. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity The Quilt Factory, pp. 9-11 • identify examples and nonexamples of one-half of a variety of shaded regions. • develop decimal concepts using models of tenths, hundredths, and then thousandths. Relate fractions to decimals, comparing regions shaded on models. See <i>Curriculum and Evaluation Standards for School Mathematics, NCTM Addenda Series, Grades K-6</i> activity Decimals on Grids, p. 59 • use models to represent concepts. (e.g., A yellow hexagonal pattern block represents one whole). Use blocks to represent $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{6}$. Vary pattern block that represents the whole. • make estimations based on independent readings in science and history. For example, estimate how much water Columbus might have carried on his ship when he crossed the Atlantic. Choose other explorers and answer similar questions. Prepare reports of exploration needs for sponsors. Use this activity to develop possible writing portfolio entries (WP-Transactive). See <i>Number Sense and Operations, NCTM Addenda Book Series, Grades K-6</i> activity Historical Voyages, p. 39 	<p>Brian has difficulty calculating and remembering numbers. He records important concepts in his learning log. Wall charts with visual aids for steps, procedures, and rules are posted throughout the room (<i>Types of extensions: demonstration of knowledge, motivation, environment</i>).</p> <p>Deniea, Jeff, Grace, Stephanie, and Andre are expressive readers and writers, like to draw, and are volunteers for their school community service project, to collect pet food for the local animal shelter. They visited the animal shelter to determine how much food to collect based on the average number of animals in the shelter per month. They set a goal and collect the food one month. They create a wall chart to record progress toward the goal. They need extended support and strategies to understand relationships between fractions and decimals. The teacher reviews the concepts using mini-lessons, provides written models for reference, and scaffolded charts (e.g., pie charts showing $\frac{1}{10}$, $\frac{1}{100}$, $\frac{5}{10}$, $\frac{1}{20}$). The students use the charts to illustrate progress toward their goal and to solve additional problems. They look for other examples of fractions and decimals (e.g., home, newspaper, community, other content areas). They use the examples to create new pie charts (<i>Types of extensions: purpose and appropriateness, procedures and routines, environment, time, demonstration of knowledge, level of support, resources and materials</i>).</p>

Grade 4 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Number Computation (2.7, 2.8, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How do you combine whole numbers?</p> <p>How do you combine fractions?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand and apply computational procedures for adding, subtracting, multiplying, and dividing whole numbers using memorized basic facts. • add and subtract fractions with common denominators using manipulatives and/or diagrams. • add, subtract, multiply, and divide whole numbers.

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use mental mathematics activities using addition, subtraction, multiplication and division of whole numbers daily, both written and oral. Make up problems for classmates to solve. • use fraction circles to demonstrate addition and subtraction of fractions with common denominators. Model problems and solutions as problems are written on the board. • explore computation of whole numbers in problems taken from newspaper articles, books, and advertisements using addition, subtraction, multiplication, and division. 	<p>The class was pretested on the fractions unit and five students were grouped on their high scores. Working with the gifted and talented consultant, they will create an illustrated fractions booklet for their peers. The book will focus on examples of fractions in other disciplines (e.g., music, art, science, etc.) <i>(Types of extensions: purpose and appropriateness, complexity, pace, order of learning, environment, level of support, motivation).</i></p>

Grade 4 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Geometry (2.8, 2.9, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How do you tell how shapes are different from each other?</p>	<p>Students will</p> <ul style="list-style-type: none"> • analyze structures of geometric figures (e.g., points, rays, lines, segments, perpendicular lines, parallel lines, angles). • investigate geometric relationship (e.g., similarity, congruence) through manipulatives and drawings. • compare and explore nonstandard units of measuring angles.

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • follow teacher instructions and demonstration to fold and cut out a 7-piece tangram set using a square piece of paper. As folds and cuts are made, answer questions about perpendicular lines, parallel lines, angles, symmetry, similarity, and congruence. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity. Exploring Right Angles, p. 32 • use pattern block pieces with the orange square as a right angle benchmark and determine measures of the other angles relative to the right angle. • use geoboards to construct figures having various numbers of right angles. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i>, p. 24. • explore expected and unexpected shadows produced by familiar geometric shapes. Tape cutout figures, such as a square to a pencil and use a flashlight to create shadows shaped like squares, rectangles, and line segments. Trace shadows into learning logs. Explain how shapes were made. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Figures and Their Shadows, pp. 27-29 	<p>Lindsey uses the tangram pieces to explore geometric relationships. She works with peers to compare solutions. They use team word-webbing to build understanding of relationships among concepts. They look for geometric shapes in art work and architecture and use examples to illustrate perpendicular lines, angles, symmetry, similarity and congruence. They create an original piece of art illustrating these concepts (<i>Types of extensions: level of support, participation, resources and materials, complexity, routines and procedures, environment</i>).</p> <p>Mark needs extra time to create geometric shapes using a geoboard prior to this activity and record each figure on dot paper. He takes the geoboard home and works on multiple problems, recording his work. He uses a guided question framework as he explains in his learning log how shapes were made (<i>Types of extensions: time, resources and materials, order of learning</i>).</p>

Grade 4 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p>Measurement (2.8, 2.10, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How do you measure important characteristics of objects (e.g., time, temperature, area, and perimeter of shapes)?</p>	<p>Students will</p> <ul style="list-style-type: none"> • relate time to days, weeks, months, and years. • add and subtract time. • read and record temperatures to the nearest degree. • measure and find area and perimeter of a rectangle. • measure and find perimeter of regular and irregular shapes; and measure and find the area of rectangle. • exchange units (e.g., linear, volume, mass) within a measurement system (e.g., 2 feet = 24 inches), 100 cm = 1 m).

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> record minutes of television watched daily for five days. Determine the average amount of television they will watch in a given number of days, weeks, months, and years. Construct graphs to communicate data. read a thermometer, recording daily noon temperatures to the nearest degree for an extended period. Construct graphs to communicate data. Explain trends in learning logs. given a specified perimeter, design various enclosed figures and determine area of each. develop a measurement process. Choose a unit for the measurement, compare the unit to the object and report the number of units and the unit. <i>See Curriculum and Evaluation Standards for School Mathematics, NCTM Addenda Series, Grades K-6, p. 52-53.</i> after measuring common classroom items (e.g., books, paper), convert measurements from inches to feet. Repeat using metric units. 	<p>Yvette needs visual supports for sequencing information. Her teacher models the series of steps used repeatedly during measuring tasks and creates a wall chart with visual aids to demonstrate necessary steps (<i>Types of extensions: procedures and routines, resources and materials</i>).</p>

Grade 4 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Probability & Statistics (2.8, 2.12, 2.13)</p>	<p>How do you ask questions about your world? How do you collect, organize, and interpret data about your questions, and how do you communicate information and make predictions relative to your data?</p> <p>How do you show data appropriately? How do you use probability experiments?</p>	<p>Students will</p> <ul style="list-style-type: none"> • explore circle graphs. • choose appropriate means to collect and represent data. • explore line graphs to show change over time. • pose questions, collect, organize, and display data. • draw conclusions based on data. • make predictions to determine the fairness of possible outcomes of simple probability experiments using a variety of appropriate manipulatives. • use counting techniques and/or tables to explore probability experiments.

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • collect data over time and analyze data in a variety of ways. Use metric rules and measuring tape to measure their height and the length of their feet monthly. Graph growth in height and in foot length for the year and for each month. Examine graphs for patterns. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Oh, How We've Changed, p. 18 • collect experimental data to examine what variables might cause a change in the distance a ball will travel when rolled through a tube. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity How Far and Why?, p. 19 • experiment with the amount of area covered by water drops on various types of absorbent papers. Pose questions, organize equipment, collect data, and analyze and report results. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Which Paper Towel Gets the Wettest?, pp. 20-21 • explore chance through a variety of colored circle spinners. Determine which color is most likely to be spun. Determine how many times a given color would be likely to be spun in a larger number of spins. See <i>Curriculum and Evaluation Standards, NCTM Addenda Book Series, Grades K-6</i> activity Spinner Activity, p. 56 • form circle graphs by arranging actual objects, such as pattern blocks in a circle and use strings from the center to divide regions of graphs. 	<p>Rade is a talented musician and strong in math. His English language skills are at the intermediate level, and he is an excellent reader and writer in his native language. In addition to receiving ESL services. Rade works with a bilingual community volunteer to help him interpret advanced level word problems. He incorporates working on specific questioning and clarification language while working in this activity (<i>Types of extensions: procedures and routines, level of support</i>).</p> <p>Elaine needs multiple opportunities to see both examples and nonexamples. Her teacher introduces her to using circle graphs to show data by using data from a recent science experiment. She shows her many examples and nonexamples of using circle graphs and then provides Elaine with guided practice to create her own circle graph using the data Elaine collected for her social studies project (<i>Type of extension: procedures and routines</i>).</p>

Grade 4 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Algebraic Ideas (2.8, 2.11, 2.12)</p>	<p>How do you use mathematics in patterns, relationships, and functions to model and solve problems?</p> <p>How do you express rules for number relationships? How do you organize patterns and relationships?</p>	<p>Students will</p> <ul style="list-style-type: none"> • compare and contrast number patterns. • explore variables and solve questions using variables. • formulate rules for number relationships. • graph points on a number line. • represent and describe relationships through the use of variables, ordered pairs, lists in tables, plots on graphs, and patterns. <p style="text-align: right;"><i>(Continued on page 18)</i></p>

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • make designs on a circle with the digits 0 through 9. Complete a table with the multiples of a given number and then circle the units digit for each multiple. Connect the points on the circle with straight lines according to the units digits just circled. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Going in Circles, pp. 3-4 • extend patterns, such as square numbers, using manipulatives. Describe patterns and tell what would come next. Create their own patterns and share with partners. Record patterns numerically, going from the pictorial to the symbolic level. See <i>Patterns, NCTM Addenda Book Series, Grades K-6</i> activity Describing Patterns Numerically, pp. 24-27 • record data related to patterns in an organized, systematic way. Count to discover the number of rectangles of unit sizes there are in an n-rectangle. Record findings in tables. Examine tables for patterns. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity How many rectangles do you see?, pp. 5-6 • recognize number patterns and test conjectures. Solve number riddles by guessing the rules that apply to sets of three numbers. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity What's My Rule? p. 4 • represent patterns both geometrically and numerically. Draw squares on dot paper, starting with 1 x 1, 2 x 2, 3 x 3. Add the number of new squares to the sequence of squares and describe patterns. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Growing Patterns with Squares, p. 61 • look for patterns by shading multiples on a hundreds chart. • plot multiples of a number on a coordinate grid using the first quadrant. • discover patterns on a 12 x 12 multiplication table, coloring separate tables for the multiples of 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Multiplication Table Patterns, pp. 2-3 • use calculators to skip count by a given number from a starting number. Record the sequence. Determine if a given sequence results from skip counting. Determine if a number is in a skip counting sequence. Use calculators to determine which term it is. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Calculator Sequence, pp. 27-28 	<p>Ann, Jean, Ted and Joey are accelerated math students in an advanced level instruction group. They can create and record intricate patterns and quickly move to challenging each other with complex problems (<i>Type of extension: pace</i>).</p>

Grade 4 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Algebraic Ideas (2.8, 2.11, 2.12)</p>	<p><i>(Continued from page 16)</i></p> <p>How do you use mathematics in patterns, relationships, and functions to model and solve problems?</p> <p>How do you express rules for number relationships? How do you organize related numbers?</p>	<p>Students will</p> <ul style="list-style-type: none"> • compare and contrast number patterns. • explore variables and solve questions using variables. • formulate rules for number relationships. • graph points on a number line. • represent and describe relationships through the use of variables, ordered pairs, lists in tables, plots on graphs, and patterns.

Grade 4 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use calculators to skip count by a given number from a starting number. Record the sequence. Determine if a given sequence results from skip counting. Determine if a number is in a skip counting sequence. Use calculators to determine which term it is. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fourth-Grade Book</i> activity Calculator Sequence, pp. 27-28 	<p>Nicki likes math and science. She uses a talking calculator as her assistive technology (<i>Types of extensions: resources and materials</i>).</p>

Grade 5 Mathematics

Course Overview:

The grade 5 mathematics course emphasizes the study of large numbers, fractions, and decimals, including multiple representations. Students measure and use angles and time, and model and classify two- and three-dimensional shapes. They explore patterns and solve equations with variables, generalize rules for ordered pairs and plot points in the first quadrant. They work with data. Student should be actively engaged, using concrete materials and appropriate technologies such as calculators, clocks, angle measures, fraction bar or strips and computer software.

Models are organized around guiding questions. Guiding questions (in bold print) direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Essential questions are included to further focus student learning.

Pages of models are arranged in pairs. On the left-hand page of each pair are guiding and essential questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Number and Computation

Guiding and Essential Questions:

What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?

- How big do numbers get?
- How do you work with wholes and parts of wholes?
- How do you combine parts of wholes?

Geometry and Measurement

Guiding and Essential Questions:

How do you interpret the world in a spatial sense? How do you analyze shapes in your world? How do you measure attributes of objects in your world?

- Do shapes or angles change when they are moved around?
- What do you measure in triangles and rectangles and how do you compare time from one place to another?

Grade 5 Mathematics

Probability and Statistics

Guiding and Essential Questions:

How do you ask questions about your world? How do you collect, organize, and interpret data about your questions, and how do you communicate information and make predictions relative to your data?

- How do you find the middle of a set of numbers?
- How do you work with data?
- How do you explore probability experiments?

Algebraic Ideas

Guiding and Essential Questions:

How do you use mathematics in patterns, relationships, and functions to model and solve problems?

- When numbers are related to each other, how do you express the relationship and how do you solve equations?
- How do you plot ordered pairs in the first quadrant?

Grade 5 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Numbers, Integers, & Place Value (2.7, 2.8, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How big do numbers get?</p>	<p>Students will</p> <ul style="list-style-type: none"> • read, write, and model whole numbers from 0 to 1,000,000,000 developing place value for ten millions and one hundred millions. • order and compare numbers to 1,000,000,000. • use factors to determine prime and composite numbers (composing/ decomposing numbers). • determine least common multiples. • explore appropriate estimation procedures.

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> form and read big numbers. Take a sheet of paper with one of the digits 0 through 9 and an appropriate number of papers with commas and go to front of room and line up. Call out numbers. Extend activity by writing 0 on the back of each number card. Show how to round to the nearest hundred. Flip cards over if their digit becomes 0 when number is rounded. use Factor Trees to factor a given number to lowest terms. Color numbers according to composite or prime numbers. Create mobiles for the classroom. <p><i>Technology suggestion: Use calculator to check factor product relationships for larger numbers.</i></p> <ul style="list-style-type: none"> use different colors for multiples on a hundreds chart. After multiples are colored, identify the common multiples of any two given numbers, these will be the numbers colored with both colors (e.g., color multiples of eight red, color multiples of four blue, common multiples will be colored both red and blue). Identify least common multiple and other common multiples. understand how sampling, measuring, averaging, and rounding add to understanding of large numbers. Count number of blades of grass in a one square centimeter of lawn and estimate how many blades of grass there are in the school lawn. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity How Many Blades of Grass are There?, p. 11 	<p>Vary the size of numbers to correspond to the development of students' number senses (<i>Type of extension: complexity</i>).</p> <p>Rocio and Cecilia use post-it notes to record questions and new vocabulary as they learn math in a new language. They conference with the ESL teacher after class (<i>Types of extensions: level of support</i>).</p>

Grade 5 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Fractions & Decimals (2.7, 2.8, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How do you work with wholes and parts of wholes?</p>	<p>Students will</p> <ul style="list-style-type: none"> • compare and apply the relative sizes of common and mixed fractions. • investigate multiple representations of equivalent fractions (e.g., $1/2 = 3/6$ mixed numbers 1 and $1/2 = 3/2$) with manipulatives, drawings, and fractional notation. • read, write, and identify decimals through ten-thousandths. • explore appropriate estimation procedures.

Grade 5 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use reasoning skills in a number line context. Use proportional reasoning to determine the number to put in a box located on a number line. Whole numbers, fractions, and decimals can be the focus of the activity. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Number Detective, p. 12 • practice estimating and computing with decimals. Draw chains of decimals with operations and an equal sign. Estimate answer and check with calculators. Move to having missing number and then missing operations. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Find the Missing Link, pp. 8-9 	<p>Kelsey is below grade level in math. The teacher should revisit the number line throughout the year to locate more complex numbers. Negative numbers can be included (<i>Type of extension: magnitude</i>).</p>

Grade 5 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Number Computation (2.7, 2.8, 2.12)</p>	<p>What do you understand about numbers and place value? What do you understand about operations on numbers? How reasonable are your answers in problem situations?</p> <p>How do you combine parts of wholes?</p>	<p>Students will</p> <ul style="list-style-type: none"> • add and subtract simple fractions with common denominators using manipulatives or symbolic notation. • add and subtract decimals to hundredths using manipulatives or symbolic notation. • explore appropriate estimation procedures.

Grade 5 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use fraction strips to demonstrate addition and subtraction of fractions with common denominators. Model and explain problems and solutions as problems are written on the board. • shade in decimals on a hundreds chart as they add or subtract decimals. Match symbolic notation to graphic representation. • use mental arithmetic to choose operations to combine three numbers on faces of three number cubes to arrive at a target number. Choose starting number before throwing cubes. Use whole numbers, decimals, or simple fractions. 	<p>Eliminate unnecessary practice to reduce redundancy for students who show mastery. Challenge them to model different denominators (<i>Type of extension: pace</i>).</p>

Grade 5 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Geometry (2.8, 2.9, 2.12)</p>	<p>How do you interpret the world in a spatial sense? How do you analyze shapes in your world? How do you measure attributes of objects in your world?</p> <p>Do shapes or angles change when they are moved around?</p>	<p>Students will</p> <ul style="list-style-type: none"> • identify and model basic two- and three-dimensional shapes by appearance and in different orientations (i.e., turn models different ways). • measure and construct angles to the nearest degree. • classify angles as acute, obtuse, or right.

Grade 5 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> combine shapes to make new shapes. Fold a shape, such as a square, into two congruent shapes of the same size and shape. Rearrange two shapes to form other shapes. Use pattern blocks to create more figures. Compare symmetry relative to original figure with that of the new shapes. See <i>Geometry and Spatial Sense, National Council of Teachers of Mathematics (NCTM) Addenda Series, Grades K-6</i> activity Figure Assembly, pp. 35-36 use the shadow method to make a clock outdoors. Compare lengths and placement of shadows of a stick upright in the ground. Research how clocks have changed through the ages. Write an article for the school newspaper on how clocks work. Use this activity to develop possible writing portfolio entries (<i>WP-Transative</i>). See <i>Geometry and Spatial Sense, NCTM Addenda Series, Grades K-6</i> activity Figures and Their Shadows, pp. 36-38 investigate solids made with cubes and draw the solids on isometric dot paper. Draw different views of the solid on dot paper. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Drawing and Building Solids Made of Cubes, pp. 30-31 using protractors or goniometer, construct angles of specified degrees and measure angles to the nearest degree. use drinking straws folded in half to model and compare acute, obtuse, and right angles. Compare each angle to angles found in objects in the room. Explain comparisons in learning logs. explore tessellations using triangles they choose. Estimate how many triangles would cover the classroom floor. Identify examples of slides, flips, and turns. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Tiling with Plane Figures, pp. 24-27 use pattern blocks to identify and draw similar planar figures. Use cubes to identify and draw three-dimensional figures. 	<p>Shelley has difficulty connecting prior knowledge to new information. Her teacher tries many strategies, such as including a variety of clocks for students to examine and extending activity to explore different time zones; Using manipulatives (e.g., solids cubes, cylinders, and prisms along with the solids made with cubes; Varying the setting by using protractor outside and measuring angles in nature (<i>Type of extensions: purpose and appropriateness, resources and materials, environment</i>)).</p>

Grade 5 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p>Measurement (2.8, 2.10, 2.12)</p>	<p>How do you interpret the world in a spatial sense? How do you analyze shapes in your world? How do you measure attributes of objects in your world?</p> <p>What do you measure in triangles and rectangles and how do you compare time from one place to another?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use charts and tables to determine time schedules and work with time zones. • determine area and perimeter of triangles and rectangles. • relate units (e.g., linear, volume, mass) within a measurement system (customary and metric e.g., 125 cm = 1 m 25 cm).

Grade 5 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use flight schedules to determine hours and minutes of flights. Give departure and arrival times based on time zones. • use geoboards and grid paper to explore area and perimeter of various size rectangles and triangles. • measure objects in the room (e.g., door, one wall, table) in customary or metric units. Next, convert measures within the measurement system used (e.g., 125 cm=1m 25cm, or 27 inches = 2 feet 3 inches). Measure volume of objects in science class. 	<p>Olman and Enrique use advanced organizers created with the teacher to help organize their thoughts and connect their prior learning to concepts being taught in English. Their organizers are used to develop cue cards for new vocabulary. The teacher adjusts duration of practice opportunities to meet their needs. They explore actual travel schedules on the Internet in their native language and plan a trip (<i>Type of extension: time</i>).</p>

Grade 5 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Algebraic Ideas (2.8, 2.11, 2.12)</p>	<p>How do you use mathematics in patterns, relationships, and functions to model and solve problems?</p> <p>When numbers are related to each other, how do you express the relationship and how do you solve equations?</p> <p>How do you plot ordered pairs in the first quadrant?</p>	<p>Students will</p> <ul style="list-style-type: none"> • create, recognize, extend, find, and write rules for number patterns. • explore variables and solve equations using variables. • generalize a rule for ordered pairs.

Grade 5 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> investigate patterns involving arithmetic operations. Generalize patterns of mathematical expressions with a variable or placeholder. Create problems that do and then undo operations. Use boxes to represent starting number and draw pictures to represent each step. recognize and create designs using reflections, translations, and rotations. Create border designs for classrooms similar to wallpaper border designs. Create templates for designs and experiment with transformations to complete designs. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Patterns Around Us, pp. 2-3 relate a trinumber to its term in the sequence of trinumbers. Use counters, such as tiles, to form equilateral triangles with sides of length n beginning with $n = 1$. Graph the relationship's ordered pairs in the 1st quadrant. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Trinumbers, pp. 3-4 	<p>Erik is a gifted math student and is easily bored. He works all problems quickly and uses numerous solution methods. Vary to include patterns found in nature, music, art, or dance (Type of extension: application and demonstration of knowledge).</p> <p>Moses uses random strategies for solving problems and has difficulty remembering problem-solving steps. Review prerequisite concepts, explaining procedures for reflections, translating and rotations (Type of extension: order of learning).</p>

Grade 5 Mathematics

Academic Expectations	Guiding and Essential Questions	Correlations to the Program of Studies
<p style="text-align: center;">Probability & Statistics (2.8, 2.12, 2.13)</p>	<p>How do you ask questions about your world? How do you collect, organize, and interpret data about your questions, and how do you communicate information and make predictions relative to your data?</p> <p>How do you find the middle of a set of numbers?</p> <p>How do you work with data?</p> <p>How do you explore probability experiments?</p>	<p>Students will</p> <ul style="list-style-type: none"> • develop meaning and interpretation of arithmetic mean (average) for numerical data. • pose questions; collect, organize, display data; and choose an appropriate way to collect and represent data. • use counting techniques, tree diagrams, and tables to explore probability experiments. • explore how sample size affects the reliability of the outcome. • make predictions. • find mean, median, mode, and range for a set of data.

Grade 5 Mathematics

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> collect and analyze data that describe how an average fifth-grade student spends their day. Design questionnaires, take random samples, interview students, collect and organize data and write reports. Present data to other classes. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Our Average Day, p. 18 explore fairness and use their knowledge of probability to solve problems. Example -Game consists of three chips, one with A and B, one with A and C, one with B and C. Experiment with the chips and then complete a tree diagram to analyze the theoretical probability. See <i>Curriculum and Evaluation Standards, NCTM Addenda Series, Grades K-6</i> activity Three Chip, p.110 understand random samples and use them to make predictions. Experiment with bags of chips, varying the colors and predict the proportions of colors in the bag after drawing a sample. See <i>Curriculum and Evaluation Standards for School Mathematics, Addenda Series, Grades K-6, Fifth-Grade Book</i> activity Mystery Characters, p. 16 use school average daily attendance data to compute class data (e.g., mean, median, mode, range). 	<p>Sally needs additional guidance to complete tasks on time. She will work in a team when experimenting with random samples (<i>Type of extension: level of support</i>).</p>

Mathematics Glossary

Absolute value: The absolute value of a number is its distance from zero on a number line. If x is the coordinate of a point on a number line, the distance from that point to the origin is called the absolute value of x , written $|x|$. This distance is always either positive or zero.

Adjacent vertices: Two vertices that are joined by an edge.

Algebra: The generalization of the ideas of arithmetic. A branch of mathematics where unknown numbers can be represented by letters and their values found to solve numbers.

Algorithm: A systematic scheme for carrying out computations, usually consisting of a set of rules or steps, the long division algorithm is an example.

Area: The number of square units in a region.

Arithmetic sequence: A sequence in which each term is equal to the preceding term plus a constant. This constant is called the common difference.

Axis of symmetry: A line over which an image mirrors itself.

Best-fit line: The linear equation that meets the agreed-upon criteria for a set of data.

Binomial: A polynomial with two terms, for example $2x + 3$.

Box and whisker plot: A graphic way of showing a summary of data using the median, quartiles, and extremes of the data. A box and whisker plot makes it easy to see where the data are spread out and where they are concentrated. The longer the box the more the data are spread out.

Coefficient: In algebra, the numerical factor of a term (e.g., in $4x^2$, 4 is the coefficient).

Coefficient of correlation: A measure of the strength of the linear dependency of y on x . It can be used to decide if a line is a good model of the data or of the accuracy of any prediction based on that linear model.

Combination: A selection of objects from a set in which order is not important.

Complex number: The sum of a real and an imaginary number written in the form $a + bi$.

Composition of functions: The process of using the output of one function as the input for another function.

Compound interest: Interest paid on earned interest.

Congruent: Two geometric figures that are the same shape and size.

Cosine: The cosine of an acute angle in a right triangle is the ratio of the length of the adjacent leg to the length of the hypotenuse.

Mathematics Glossary

Counting principle: If there are n_1 ways to make a first choice, n_2 ways to make a second choice, n_3 , ways to make a third choice, and so on, then the product $n_1 \cdot n_2 \cdot n_3 \cdot \dots$ represents the total number of different ways (outcomes) in which the entire sequence of choices can be made.

Data: A set of numerical information.

Data analysis: A process of deriving information from data.

Degree: The degree of a polynomial is the highest power of a variable in the expression. If the terms contain more than one variable, the degree is the highest value among the sums of the exponents in the individual terms.

Dependent events: When the occurrence of one event has an effect on the occurrence of a following event, the events are said to be dependent.

Deviation: The directed distance from each data value to the mean. Values below the mean have a negative deviation, and values above the mean have a positive deviation.

Discrete graph: A graph containing unconnected points.

Distance between two points: The distance between any two points located at (x_1, y_1) and (x_2, y_2) is the square root of the quantity $[(x_2 - x_1)^2 + (y_2 - y_1)^2]$

Distance formula: The formula used in coordinate geometry to find the distance between two points.

Domain of function: The set of all first members (elements) of a function.

Equation: A mathematical sentence with an equal sign.

Experimental probability: Probability that is based on trials and observations or simulation of the event.

Explicit formula: A formula for a sequence or the sum of a series that defines a rule for calculating a term or sum based on the term's number.

Factored form: The form of a polynomial equation written as the product of linear factors. In $y = A(x - R_1)(x - R_2)$ the roots are at R_1 and R_2 .

Fractal: A shape that is self-similar; that is, it contains infinitely many exact replicas of itself on various scales.

Frequency: The number of times an event has occurred.

Function: A set of ordered pairs such no two ordered pairs have the same first member.

Mathematics Glossary

Generalization: A statement that expresses some relationship that is true for all numbers in a specified set.

Geometric mean: The geometric mean of two numbers is the square root of their product.

Geometric progression: Also called *Geometric sequence*. A sequence of numbers in which each succeeding term is obtained by multiplying the preceding term by the same number.

Geometric sequence: A numeric sequence in which each term is equal to the preceding term multiplied by a constant, or $u_n = r \cdot u_{(n-1)}$. The constant r is called the **common ratio**.

Graph theory: The use of diagrams involving vertices and edges in finding mathematical solutions to problems.

Half-life: The length of time needed for a value to decrease to half of its original amount. This term often refers to the decay of a radioactive material.

Histogram: A bar graph in which the length of the bars shows the frequency of data values.

Imaginary number: The square root of a negative number.

Independent variable: In a function of two variables, one variable is dependent and the other independent.

Inductive reasoning: Reaching a conclusion on the basis of patterns found in a number of observations.

Interquartile range: The difference between the lower (first) and upper (third) quartiles (the length of the box in a box plot).

Irrational number: A number whose decimal expansion is nonrepeating and nonterminating, for example, 2 and pi.

Least-squares line: A best-fit line determined by calculating the line with the minimum sum of the squares of the residuals.

Limit: A central concept of calculus indicating a number that a sequence of numbers approaches. A value a function approaches but never attains.

Limiting value: The long-run value of a sequence or a series. The value as n grows infinitely large.

Line of symmetry: A line that divides a graph into two common congruent pieces. If the graph could be folded along this line, the two halves would lie directly on top of each other.

Linear: Having to do with a line, a first-degree expression, a first-degree equation, or a first-degree polynomial.

Mathematics Glossary

Linear function: A function that can be expressed in the form of a linear equation (an equation in which a variable is raised to the first power).

Logarithm: In the equation $a = b^x$, the logarithm base b of a provides the value of the exponent, $\log_b a = x$. The logarithm is the exponent for b to give the value a .

Mathematical model: An equation or rule that describes a relationship that closely fits a set of data.

Matrix: A rectangular array of numbers. The dimensions of a matrix are specified by the number of rows and columns it contains. A 2 x 3 matrix contains 2 rows and 3 columns.

Maximum value: The highest (largest, greatest) value.

Mean: The average value calculated as the sum of all the values divided by the number of values in the set.

Measure of central tendency: A single value used to characterize or represent an entire set. Examples include the mean, the median, and the mode.

Median: The middle number of an ordered set. If the set has an even number of values, then the median is the average of the two middle values.

Mode: The value that occurs most frequently in a set.

Normal distribution: A symmetric and “bell-shaped” distribution. It is the limiting shape of the binomial distribution as n grows increasingly large.

Outlier: A value in a data set that is uncharacteristic of most of the data.

Period: The length of the x -interval required for the graph of one complete cycle before the graph begins to repeat itself.

Periodic function: A function whose graph repeats over and over again.

Permutation: An arrangement or selection of objects from a set when order is important.

Polynomial: An expression made up of the sum of terms whose variables have only positive whole-number powers.

Probability: The chance of an event occurring. The number of favorable outcomes divided by the total number of all possible outcomes. If you toss a coin 100 times and a head lands up 56 times, the experimental probability of heads landing up is $56/100$ or $14/25$. The theoretical probability of heads landing up is 1 out of 2 or $1/2$.

Mathematics Glossary

Proportion: A statement of the form $a/b = c/d$. Each of a , b , c , d , is called a term of the proportion. In a proportion, a and b (the first and fourth terms) are called the extremes and b and c (the second and third terms) are called the means. The product of the means equals the product of the extremes.

Pythagorean theorem: A relationship between the lengths of the sides in a right triangle.

Quadratic equation: A polynomial equation containing a variable to the second degree.

Quartile: Part of a data set that contains 25% of the data. The median of the entire set of data values is called the second quartile. The median of the data values below the median of the set is called the first quartile. The median of the data values above the median is called the third quartile.

Random: Happening by chance.

Random numbers: Numbers that when generated are equally likely to occur and do not form a pattern in the sequence of numbers.

Range of a relation: The set of possible values for the second coordinates in a relation.

Range of a data set: The absolute value of the difference between the largest value and the smallest value of a data set.

Recursive definition: A set of statements that specifies one or more initial terms and defines the n th term in relation to one or more of the preceding terms.

Relation: A correspondence between an independent variable and a dependent variable.

Residual: The difference between the y -value of a data point and the y -value of the equation with the same x -value. Points below the graph of the equation have negative residuals, and points above the graph have positive residuals.

Root: The x -value where the graph of an equation crosses the x -axis. Same as zeros of an equation.

Sample space: In probability, the set of all possible outcomes of an experiment.

Scattergram: A graph that shows the relationship between two quantities.

Scientific notation: Any number written as a number between 1 and 10, multiplied by a power of 10.

Sequence: A set of elements in a specific order determined by a rule or formula.

Series: The sum of the terms of a sequence. The n th partial sum, S_n , of a series is the sum of the first n terms of its companion sequence.

Sine: The sine of an acute angle in a right triangle is the ratio of the length of the opposite leg to the length of the hypotenuse.

Mathematics Glossary

Skewed: To be distributed, or stretched, in a nonsymmetric way.

Slope: A ratio of the rate of increase (or decrease) of a line. The slope of a line is $\frac{\text{change in } y}{\text{change in } x}$

Standard deviation: The square root of the variance. It is a measure of spread used for single-variable data.

Statistics: Various methods used to obtain numbers to characterize a data set.

Stem-and-leaf plots: A display of a set of data in which each piece of data is grouped together on a specific row and arranged in two columns.

System of equations: Two or more equations that are solved or studied simultaneously.

Tangent: The tangent of an acute angle in a right triangle is the ratio of the length of the opposite leg to the length of the adjacent leg.

Theoretical probability: Probability that is based on calculation or physical properties of the event without actually performing or simulating.

Variance: The mean value of the squares of the deviations from the mean of the data.

X-intercept: The point where a graph crosses the x-axis.

Y-intercept: The point where a graph crosses the y-axis.

Zero: The x-values that make an expression have a zero value. Same as roots and x-intercept.

Physical Education

Grade 4 Physical Education

Course Overview:

The fourth-grade physical education program continues the development and refinement of motor skills and their application to various games, sports, and other physical activities. Defining fitness skills, demonstrating improvement of skills, and building positive attitudes toward lifetime physical fitness are benefits derived from participation in fourth-grade physical education programs.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding and essential questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- How can I benefit from regular exercise?
- How will improving fundamental skills contribute to the enjoyment of physical activity?
- How will cooperation with my peers help improve my skills in games?

Grade 4 Physical Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Personal Wellness (2.31)</p>	<p>How can I benefit from physical exercise?</p>	<p>Students will</p> <ul style="list-style-type: none"> • identify benefits of regular participation in physical activity. • exercise to improve strength, fitness, and wellness. • monitor pulse rate. • demonstrate cardiorespiratory endurance. • demonstrate stretching exercises. • recognize benefits of participation in school and community recreational activities.

Grade 4 Physical Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • participate in appropriate warm-up and cool-down activities (e.g., walking, jogging, stretching). • participate in appropriate physical activity (e.g., fitness circuit, games) to improve strength, fitness, and wellness (e.g., rope jumping, running). • practice taking their own heart rate at specific times during physical activity (e.g., resting peak of activity, recovery). Determine and document baseline data for pulse rate in individual fitness journals. Compile data on changes in pulse rate as physical activity continues and increases throughout the class. Enter data on spreadsheets and prepare graphs to illustrate changes in pulse rates. Use graphs for oral presentation to encourage increased participation in physical activities. <p><i>Technology suggestion: Use graphical analysis software to analyze data.</i></p> <ul style="list-style-type: none"> • record in fitness journals individual participation in school and community recreational activities. Write personal narratives about participation in recreational activities. Focus on challenges and benefits (e.g., physical, social, emotional) the activity held for the writer. <i>Use this activity to develop possible writing portfolio entries (WP-Personal).</i> 	<p>Carl is recovering from thoracic surgery and would benefit from a regular program of physical activity. He feels the twenty minutes a day allotted to physical education is not enough to accomplish his goal of improving his health to the extent that he will eventually be able to participate in team sport activities after school. Provide Carl with a schedule of fitness-improving activities coordinated with his physician he can participate in on his own before and after school. Have Carl maintain records on a spreadsheet and test periodically to see if program modifications are necessary (<i>Types of extensions: purpose and appropriateness, complexity, magnitude, time, level of support</i>).</p>

Grade 4 Physical Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Psychomotor (2.34)</p>	<p>How will improving fundamental skills contribute to the enjoyment of physical activity?</p>	<p>Students will</p> <ul style="list-style-type: none"> • perform fundamental skills (e.g., throwing, catching, kicking, striking, jumping, dribbling) while improving speed and accuracy. • develop multi-combination of movements required for successful involvement in sports and physical activities. • develop and refine movement patterns using locomotor (e.g., walk, run, hop) and nonlocomotor (e.g., push, pull, twist, turn, curl, stretch, balance) skills and manipulatives. • demonstrate proficiency in a variety of movement skills. • apply movement strategies in various games and sports.

Grade 4 Physical Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • develop, refine, and demonstrate motor skills through the use of obstacle courses. Monitor speed and accuracy in completing obstacle courses and record in fitness journals or spreadsheets. Design new obstacle courses that could be used to improve specific skills (e.g., kicking, jumping, throwing). Explain objectives and rules to class for new obstacle course. Use new course as end of lesson assessment. Prepare user's manual or brochure for new obstacle course (<i>WP-Transactive</i>). • observe athletes participating in favorite sports. Analyze skills necessary to compete successfully. Write fitness journal entries describing movements or movement combinations that were performed well. Compare athlete ability with personal ability to perform like skills. Use videos of personal activity or use critiques of personal performance by other classmates to validate comparison. • choose one locomotor skill and plan a personal improvement plan. Implement plan for one month. Record plan and progress in fitness journals. Evaluate effectiveness of plan, revise, and collect data for three more weeks and evaluate. Participation in physical activities that require this skill. 	<p>Mary is in the gifted and talented program at her school. Physical education class is her least favorite class. She was hesitant about participation in physical activities because of her awkwardness. Provide Marie with a series of drills to practice at home prior to the scheduled school use of the skill to enhance her movement and object manipulation skills and build her confidence to participate (<i>Types of extensions: purpose and appropriateness, complexity, magnitude, order of learning, procedures and routines, participation</i>).</p>

Grade 4 Physical Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Lifetime Activity (2.35)</p>	<p>How will cooperation with my peers aid in my skill development?</p>	<p>Students will</p> <ul style="list-style-type: none"> • demonstrate cooperation with partners in small and large groups. • practice to improve skills. • apply the concept of sportsmanship (e.g., complying with rules, responding appropriately) in games, sports, and physical activities.

Grade 4 Physical Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • participate in classroom activities using good sportsmanship and cooperation among team members. Video classroom activities for period of time (e.g., week, month). Observe and evaluate sportsmanship skills of peers. Write observations in fitness journals. Create collages and bulletin boards showing good sportsmanship or cooperation among team members. Draw cartoons showing evidence of sportsmanlike conduct. • interview group members and group leaders to gather information about the importance of cooperation from different perspectives. Write articles for school newspaper showing advantages of cooperation versus disadvantages of being uncooperative among group or team members (<i>WP-Transactive</i>). • brainstorm ways cooperation or good sportsmanship can help improve skills. Make posters with information and display in gym. <p>Technology suggestion: Use desktop publishing software to create articles and cartoons.</p>	<p>Francois is an excellent athlete. He has limited English language skills and often does not understand the teacher's directions. When introducing and playing a new game, permit Francois to serve as a demonstrator and provide him with a laminated copy of the rules in his own language to keep with him for reference during play (<i>Types of extensions: purpose and appropriateness, environment, resources and materials</i>).</p>

NOTES

Grade 5 Physical Education

Course Overview:

Students in fifth-grade physical education will demonstrate improvement in motor skills, develop and refine movement patterns, and practice socially acceptable behavior, and sportsmanship during activity and game participation. Students will begin identifying the basic components of fitness, and evaluating their own fitness levels.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding and essential questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- How do I determine the benefits of exercise?
- How can refining skills increase enjoyment of physical activities?
- How can I challenge my skill level while playing group games?

Grade 5 Physical Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Personal Wellness (2.31)</p>	<p>How do I determine the benefits of exercise?</p>	<p>Students will</p> <ul style="list-style-type: none"> • explain the relationship of exercise to fitness and wellness. • explain concepts of muscular strength and endurance, flexibility, and cardiorespiratory endurance. • evaluate their own progress toward fitness goals using appropriate instruments (e.g., stopwatch, tape measure).

Grade 5 Physical Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • demonstrate on fitness tests current levels of muscular strength, endurance, flexibility, and cardiorespiratory endurance. Establish new goals and develop plans to meet goals. Record in fitness journals. • measure distance around gym. Run around gym, recording baseline speed for that distance in fitness journal. Measure distance around school. Calculate time it would take to jog around school at baseline speed. Practice until targeted speed is met. 	<p>Josh is unable to participate in strenuous physical activities because of injuries sustained in an accident. To encourage Josh to maintain interest in physical activity, provide for limited participation and allow him to design plays and record results of activities on a database (<i>Types of extensions: purpose and appropriateness, procedure and routines, level of support, participation, motivation</i>).</p>

Grade 5 Physical Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Psychomotor (2.34)</p>	<p>How can refining skills increase enjoyment of physical activities?</p>	<p>Students will</p> <ul style="list-style-type: none"> • perform fundamental skills (e.g., throwing, catching, kicking, striking, jumping, dribbling) while improving speed and accuracy. • develop multi-combination of movements required for successful involvement in sports and physical activities. • develop and refine movement patterns using locomotor (e.g., walk, run, hop) and nonlocomotor (e.g., push, pull, twist, turn, curl, stretch, balance) skills and manipulatives. • demonstrate proficiency in a variety of movement skills. • apply movement strategies in various games and sports.

Grade 5 Physical Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • choose skills needed to participate in favorite sport or dance. Practice skills to improve speed and accuracy. Teach skills to peers in class. Videotape skill lessons to use for student self-evaluation. Participate in various activities and sports that improve skill level. • create and demonstrate rhythmic activities (e.g., square dance, line dance, jump rope routines). Create illustrated guides explaining dances for peers in other schools. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> 	

Grade 5 Physical Education

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p>Lifetime Activity (2.35)</p>	<p>How can I improve my skill level while playing group games?</p>	<p>Students will</p> <ul style="list-style-type: none"> • demonstrate cooperation with partners in small and large groups. • practice to improve skills. • apply the concept of sportsmanship in games, sports, and physical activities.

Grade 5 Physical Education

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • choose partners to practice skills needed to successfully participate in group folk games. Change partners frequently to nurture cooperation between a variety of peers. Play games for 15 minutes. Take breaks to discuss cooperation and sportsmanship. Write position papers supporting the role of games in increasing the feelings of “community” in early settlements. (<i>WP-Transactive</i>) • participate in class sports activities. Explain in journal courtesies and sportsmanship observed. • research benefits of participation in leisure, recreational, and competitive physical activity. Create brochures promoting the benefits of leisure time activities to be distributed at YMCAs or other health clubs (<i>WP-Transactive</i>). <p><i>Technology suggestion:</i> Use desktop publishing software to create brochures.</p>	<p>Eva and Olivia are proficient in their native language. They are fluent English speakers for social purposes and have intermediate English skills in reading and writing. They use semantic maps to develop vocabulary and show relationships among concepts and their native languages. Eva and Olivia share games from their culture and teach other students the games. They compare and contrast the games to other folk games. The ESL teacher works with Eva and Olivia using the CALLA. The teacher models questioning and language to ask for clarification. Eva and Olivia practice questioning and asking for clarification during the discussions (<i>Types of extensions: level of support, procedures and routines</i>).</p>

Physical Education Glossary

Anaerobic exercise: Intense physical activity lasting only a few seconds to a few minutes.

Isokinetic exercise: Exercise that makes use of weight-training machines to move muscles at a constant rate of speed throughout their full range of movement.

Isometric exercise: Exercise in which a muscle contracts but does not shorten. This type of exercise increases strength but only at the joint angle at which the exercise is performed.

Isotonic exercise: The contraction and relaxation of muscles through their full range of motion. This type of exercise develops muscle strength.

Muscular endurance: The ability of a muscle or a group of muscles to apply force over a period of time.

Muscular strength: The ability of a muscle to exert or to resist a force.

Physical fitness: The ability of the heart, blood vessels, lungs, and muscles to work together to meet the body's needs.

Plyometric: Those activities that produce an overload of isometric type of muscle action which invokes the stretch reflex in muscles.

Warm-up: A 5-to-10 minute period during which you prepare your body for vigorous exercise.

Science

Grade 4 Science Integrated Science

Course Overview:

This integrated course model is designed to support an inquiry-based, minds-on, hands-on approach to help students begin to understand their surroundings. They will link physical, Earth/space, and life science concepts through inquiry and real-life applications and connections. Students will investigate properties of objects and materials, position and motion of objects, light, heat, electricity, and magnetism, properties of Earth materials, objects in the sky, changes in Earth and sky, and organisms' characteristics, life cycles, and environments.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- **How can I investigate the properties of matter?**
- **What factors influence motion and what effects result from motion?**
- **How do magnets, electricity, heat, and light affect me?**
- **What materials make up our Earth?**
- **What can we learn about the Sun and other objects in the sky?**
- **What evidence can I gather to show patterns and change over time in the Earth and sky?**
- **How are characteristics of organisms similar and different?**
- **What patterns exist in organisms' life cycles?**
- **How do environments and organisms affect each other?**

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>How can I investigate the properties of matter?</p>	<p>Students will understand that Physical Science</p> <ul style="list-style-type: none"> • properties of materials can be used. • materials can exist in different states. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • examine the interaction between science and technology. • examine how science fosters understanding of natural resources. • demonstrate how science helps explain changes in environments. • use science to design technological solutions to problems. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> fill identical small containers (e.g., film canisters, yogurt containers with lids) with a variety of materials (e.g., rice, cotton, coins, sand, stones, water, popped and unpopped corn, bird seed, rubber bands, oatmeal) of different densities. Use scales or balances and standard units of measure to weigh each container. Measure volume of containers and include with data. Display results in bar graphs. Analyze data and formulate conclusions in groups and report to entire class for discussion. Utilize data as evidence to write about the question, “Do big things weigh more than little things?” and explain how data helped formulate their reasoning. Give examples of several common objects that support reasoning. Discuss individual conclusions and examples. <i>Write answers to open-response questions exploring differences and similarities among basketballs, bowling balls, beach balls and explaining why each is used for its particular sport.</i> design comparative tasks and experiments to explore rate of evaporation of water. Students will determine what factors (e.g., temperature of water, surface area of water, humidity, and temperature of surrounding air) influence evaporation rate. Compile data in groups and make generalizations. Apply conclusions to predict most efficient conditions for drying wet laundry without using dryers. 	<p>Susan and Butch understand properties of matter on a level above their classmates. They will investigate the relationship of weight and nutritional value of natural and prepared foods. They will formulate generalizations based on their findings and present them with supporting evidence on consumer guide posters (e.g., boxes of breakfast foods, bags of potato chips) <i>(Types of extensions: motivation, participation, complexity, level of support, demonstration of knowledge).</i></p> <p>Carol and Ann are in the gifted program at their school. They are intrigued by evaporation of substances. They will relate water cycle in terraria to observed behaviors (e.g., condensation) of water. They will further investigate, observe, and record results of experiments they have designed on the evaporation of substances (e.g., food coloring, salt solution, sugar solution) that contain water <i>(Types of extensions: motivation, complexity, purpose and appropriateness, resources and materials).</i></p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>What factors influence motion and what effects result from motion?</p>	<p>Students will understand that Physical Science</p> <ul style="list-style-type: none"> • the position and motion of an object can be described. • the position and motion of an object can be changed. • sounds are caused by vibrating objects. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • examine the interaction between science and technology. • use science to design technological solutions to problems. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> investigate effect mass has on amount of pull required to start a light, flat container sliding across level surface. Attach spring scale to container filled with a known mass (e.g., rocks, sand, washers, aquaria gravel). Pull on container with scale and record scale reading at the point container begins to slide (e.g., moves at least 1 cm.). Repeat several times and average data. Perform same procedure with variety of masses in containers, and construct graphs showing relationship of pull required to mass contained. Formulate conclusions. Relate to experiences (e.g., pulling sled with different people or different numbers of people). Extend activity by designing and conducting experiments to examine effect that various surfaces (e.g., carpet, tile, asphalt, tabletop, concrete) have on force needed to make container start moving. investigate sounds caused by vibrating objects. Design comparative studies to gather information on sound produced by vibrating (e.g., plucked) rubber bands. Identify variables (e.g., thickness, tension, length). Investigate to determine how variables influence sound produced when rubber band is plucked. Use conclusions to design and construct a three or more stringed rubber band instrument that produces low, medium, and high pitches. Share and compare instruments. Discuss designs with class. 	<p>Nancy, Wendell, Julie, and Larry are very creative and love music. They apply their creative talents to design a variety of instruments using vibrating objects (<i>Types of extensions: demonstration of knowledge, participation, motivation, complexity</i>).</p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>How do magnets, electricity, heat, and light affect me?</p>	<p>Students will understand that Physical Science</p> <ul style="list-style-type: none"> • magnets attract and repel. • electrical currents move through electrical circuits. • heat can move from one object to another. • light travels in a straight line. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • examine the interaction between science and technology. • demonstrate how science helps explain changes in environments. • use science to design technological solutions to problems. • examine the role science plays in everyday life. <p style="text-align: right;"><i>(Continued on page 10)</i></p>

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • design experiments to determine distance magnets can attract. Use variety of objects (e.g., paper clips, nails, washers). Record data and analyze findings. Extend this activity by using different types of magnets to compare data and analyze findings. Create a system (e.g., strongest to weakest) for categorizing various magnets in the classroom. • investigate the flow of electricity. Create simple circuits using wire, battery, switch and light source. Create drawings of open and closed circuits. Investigate different types of circuits. • create electromagnets with basic materials (e.g., battery, wire, nail). Test materials attracted to electromagnets. Compare magnet to peers' magnets. Discuss ways to create magnets that are more powerful. Analyze and research uses of magnets in common items (e.g., motors). • investigate how different materials affect the rate at which heat moves. Fill three different containers (e.g., styrofoam, paper cup, tin can, glass jar) with equal volumes of hot tap water. Measure and graph temperature of water in each container over time as it cools. Place containers in shallow pan of ice to accelerate cooling. Describe where the heat is going as temperature of water decreases. Interpret data to develop working definitions of conductor and insulator. Examine commercial food packaging materials and explain which of their properties the manufacturer considered when they were selected for use. Design, construct and test an insulated thermos (one container inside another separated by an insulating material). Examine effectiveness of common materials (e.g., popcorn, shredded paper, gravel, cereal) as insulators. Share and compare thermos designs. Design brochures for the other students in the school to inform them about ways they could pack their lunches to improve conditions of their food for lunch time (<i>WP-Transactive</i>). 	<p>Mercedes is beginning to understand spoken English as a second language and some print media. Her teacher presents concepts using graphic organizers, scaffolding, and manipulatives. She simplifies the language used. Working with a peer, she reviews the vocabulary necessary to explore magnets. Mercedes is given additional time to complete assignments. She designs experiments with three other students (<i>Types of extensions: time, procedures and routines, complexity, level of support</i>).</p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p><i>(Continued from page 8)</i></p> <p>How do magnets, electricity, heat, and light affect me?</p>	<p>Students will understand that Physical Science</p> <ul style="list-style-type: none"> • magnets attract and repel. • electrical currents move through electrical circuits. • heat can move from one object to another. • light travels in a straight line. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • examine the interaction between science and technology. • demonstrate how science helps explain changes in environments. • use science to design technological solutions to problems. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> investigate light's tendency to travel in straight lines until it strikes an object. Collect a variety of common objects (e.g., balls, books, blocks, cylinders, bowls) and draw their predictions of the various shapes of shadows each will cast. Illuminate a wall with a single clear (not frosted) light bulb. Place objects between the light and wall to cast shadows on wall. Illuminate objects to check predictions. Discuss the variety of shadow shapes produced by a single object and will discuss the impact of relative position. Design experiment to determine how size of shadow relates to the distance object is placed from light source. Explore shadow shapes (e.g., students, trees, building) outside throughout day. Construct model demonstrating how shadow size, shape, and location are affected by the Sun. Diagram the light-object-shadow system showing clearly the relative position and size of each and characteristics of resulting shadows. Reflect on how shapes of shadows are affected by the fact that light travels in straight lines. 	<p>Richard participates in class with his peers working on specific communication and social goals. His role in the group activity is to choose between two switches and activate the lights with peer assistance (<i>Types of extensions: purpose and appropriateness, environment of learning, participation, level of support</i>).</p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>What materials make up our Earth?</p>	<p>Students will understand that Earth/Space Science</p> <ul style="list-style-type: none"> • Earth's materials are solids, water, and gases. • fossils provide evidence. • Earth's materials have different physical and chemical properties. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • distinguish between natural objects and objects made by humans. • examine how science fosters understanding of natural resources. • demonstrate how science helps explain changes in environments. • describe the role of science and technology in local issues. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • collect geological data from streams or land formations near local schools. Write articles about findings including drawings and photographs. Publish articles in school newsletters. • compare properties of soils by designing investigations to measure speed of water runoff, porosity, and permeability of rock materials in soil (e.g., sand, clay, silt). Create graphic illustrations to show effects of different type soils on runoff, porosity, permeability. Compare illustrations to soils in Kentucky river areas. Share data via electronic mail with students in other states. See <i>Project Learning Tree Environmental Education Activity Guide</i> activities Sand, Silt and Clay Succession and Soil Compaction <p>Technology suggestion: Use spreadsheets in integrated software packages or with graphing program to create graphs. Use e-mail and Internet to share collected data.</p> <ul style="list-style-type: none"> • investigate where coal deposits are found. Map areas where fossil fuels are found in Kentucky. Explain how coal forms, why coal is found only in certain areas, and how coal mining impacts economics and the environment. Create models to show how coal forms. • explore how fossils form (e.g., molds, casts, mineralization, imprints, ice, amber). Research different types of fossils found in Kentucky. Compare fossils (e.g., brachiopods, leaf imprints, coral) to non-fossilized, modern counterparts (e.g., seashells, leaves, coral). Research and identify parts of organisms more likely to be fossilized (e.g., bones, shells, teeth). Compare the ancient environment (i.e. oceans) of Kentucky's state fossil (brachiopods) to current environments. Create comparative dioramas to show how Kentucky's environment has changed over time. • research and explain why limestone is so prominent throughout Kentucky. Identify how limestone affects humans (e.g., sinkholes, caves, water hardness, economics of rock quarries, soil pH, phosphates). Create consumer pamphlets explaining how limestone impacts humans including the horse farms of the Bluegrass area. Distribute at open house in local schools. 	<p>Randy, Emma, Fazli and Allen learn new concepts and vocabulary easier when they receive direct instruction on strategies for accessing meaning and connecting concepts to a real life context. Multiple meanings of words and phrases often cause them to misunderstand the content being presented. They receive instruction on the use of the <i>Concept Comparison Routine</i> (University of Kansas Center for Research on Learning). To develop their vocabulary and concept knowledge, they are taught mnemonic strategies and the <i>Clarifying Routine</i> (University of Kansas Center for Research on Learning).</p> <p>Robin and David are working on strategies to improve their processing of materials they read. Their teacher models reciprocal teaching strategies to assist them in summarizing, generating questions, clarifying, and making predictions about what they have read. They apply the reciprocal teaching strategy to reading materials about coal deposits (<i>Types of extensions: procedures and routines, level of support, purpose and appropriateness</i>).</p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>What can we learn about the Sun and other objects in the sky?</p>	<p>Students will understand that Earth/Space Science</p> <ul style="list-style-type: none"> • the Sun provides light and heat. • common objects in the sky can be observed and described. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • examine how science fosters understanding of natural resources. • demonstrate how science helps explain changes in environments. • use science to design technological solutions to problems. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use thermometers to collect data demonstrating how outside temperature is influenced by sunlight and how temperature changes over time. Explore differences in temperatures measured in sun and shade. Perform long term investigations by recording temperature in the shade and observing weather conditions every hour throughout school day. Repeat process for several days with variety of weather conditions (e.g., sunny, cloudy) producing daily line graphs summarizing temperatures versus time of day. Interpret graphs to infer effect sun and weather conditions have on temperature of our daily environment and to predict temperature patterns for future days. Extend this activity by hypothesizing what the temperature pattern may be during the night and follow up with measurements at home. Produce temperature versus time graphs throughout year. Compare data from different seasons. Design projects to demonstrate how clothing worn by peers in other parts of world is affected by temperature in their environment. <p><i>Technology suggestion: Use Internet to access daily temperature data from other parts of the world at variety of latitudes and compare with local data.</i></p> <ul style="list-style-type: none"> • observe and describe the Moon. Draw the Moon's shape on a calender each day for a month. Note whether the Moon is visible in daytime or nighttime. 	<p>Sharon can understand most information presented to her if she uses a visual device for organizing the information. When asked to collect and record data on temperatures, she is provided a visual grid so that she can easily organize information (<i>Types of extensions: resources and materials</i>).</p> <p>Nick uses assistive technology (e.g. computer touch screen, headpointer) and special software to draw the Moon's shape on the calendar (<i>Types of extensions: resources and materials, participation</i>).</p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>What evidence can I gather to show patterns and change over time in the Earth and sky?</p>	<p>Students will understand that Earth/Space Science</p> <ul style="list-style-type: none"> • objects in the sky have patterns of movement. • weather changes. • Earth's surface changes are slow and rapid. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • distinguish between natural objects and objects made by humans. • examine the interaction between science and technology. • examine how science fosters understanding of natural resources. • demonstrate how science helps explain changes in environments. • use science to design technological solutions to problems. • describe the role of science and technology in local issues. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use a gnomon (instrument used to record changes in shadows). Create by nailing a long nail through the center of a board. Place a piece of paper over protruding nail and secure paper to board. Be sure to place board in same exact position, location, and orientation each day to record data. to record shadow cast by nail each hour or two during school day. Continue to collect data for 5 sunny days (need not be consecutive days). Use charts to make inferences about relative motion of Earth and Sun and predict shadows. Repeat process during different seasons throughout school year. Examine charts for patterns related to seasons. Predict general patterns throughout course of year. Model, describe, and discuss relative motions of Earth and Sun over course of entire year. Describe how and why student shadows change in course of a day. • create instruments designed to measure wind speed, direction, precipitation, and humidity. Establish class weather station. Collect, record, and analyze data on regular basis throughout the year. Use Internet or newspaper to compare class data with official data. Look for patterns over time (e.g., trends) in weather data. Make predictions about future weather using evidence or data to support predictions. Correspond via e-mail with other classes across the U.S. to look for patterns and trends (e.g., weather moving in particular direction or at certain speed). • examine erosion in local environment (e.g., sides of road, streams). Investigate factors that affect rates of erosion. Present findings to local chamber of commerce or conservationists. • visit cave formations. Discuss process by which they were created. Gather information (e.g., observational, sensory) while there. Gather additional information via books, Internet, or other materials on observed cave formations. Create presentations for other students explaining changes in our earth which promote cave formation. <p>Technology suggestion: Use CD-ROMs, digital cameras, video and audio recorders to create multimedia presentations.</p>	<p>Camille is very social and has strong math skills. She is deaf. She uses an interpreter who uses signed English during class. The teacher provides Camille with a guide of targeted language structures to use when taking notes and in her presentation. Camille uses a self assessment guide to check her performance. In her presentation to the chamber of commerce, she signs while her interpreter voices her text. The class is learning signed English (Types of extensions: participation, resources and materials, level of support, demonstration of knowledge).</p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>How are characteristics of organisms similar and different?</p>	<p>Students will understand that Life Science</p> <ul style="list-style-type: none"> • organisms have basic needs. • behavior is influenced by stimuli. • organisms have different structures that serve different functions. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • distinguish between natural objects and objects made by humans. • recognize how science helps to understand populations. • demonstrate how science helps explain changes in environments. • use science to design technological solutions to problems. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> investigate basic needs of organisms. Observe locations (e.g., shade, sun, water, moist, dry) of types of flowers around homes and schools. Use secondary data (e.g., Internet, books, magazines) to research various flowers observed. Publish data about flowers and use to create school beautification plans that will indicate where additional flowers can and should be planted. Share work with local florists, nurseries, or garden clubs. investigate behavior of organisms (e.g., plants, animals, fungi, protists, monera). Design experiments to investigate plants' reactions to various stimuli (e.g., gravity, light). Discuss reasons for observations. Write articles discussing needs of organisms and share with peers. investigate protective techniques (e.g., camouflage, mimicry) of organisms. Create children's books on organisms' protective behaviors and characteristics. Read books to primary classes (<i>WP - Transactive</i>). classify groups of objects (e.g., buttons) based on physical characteristics. Create dichotomous keys. Observe groups of organisms (e.g., plants, animals, fungi) and group based on physical traits. Create dichotomous keys for organisms. Compare student keys to scientific keys. Identify characteristics scientists use to classify organisms. Explain how structures are related to the functions. 	<p>Kelsey and Becca learn at a faster pace than their same-age peers. They access text using 40 point font. To access reading material about the needs of plants, they are provided large-print books or use enlarged font on the computer. They create a multimedia presentation for garden clubs (<i>Types of extensions: resources and materials, level of support</i>).</p>

**Grade 4 Science
Integrated Science**

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>What patterns exist in organisms' life cycles?</p>	<p>Students will understand that Life Science</p> <ul style="list-style-type: none"> • organisms resemble their parents. • organisms have life cycles. • characteristics of organisms are inherited or learned. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • recognize how science helps to understand populations. • demonstrate how science helps explain changes in environments. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> compare adult animals to young by creating Venn diagrams. Share information among class. Focus on animals that go through a metamorphosis looking for patterns that link them to their parents. Use pictures or mirror reflections of students and pictures of students' family members to compare characteristics that are hereditary. Chart findings. Compile individual data into class data bank to determine most or least common hereditary characteristics in class. Compare findings to another group or class of students to test for reliability of conclusions or inferences. design simple investigations comparing growth of plants with growth of offspring plants (e.g., plants grown from harvested seeds of adult plants). Chart similarities and differences. Infer characteristics that appear to be result of heredity more than environmental conditions. 	<p>Boris and Yuri have recently immigrated to the U.S. They are beginning English speakers, readers writers, and listeners. They pair English words with pictures for various animals. They also listen to audiotapes in their native language that describe metamorphosis. They create bilingual posters of animals and their young in addition to Venn diagrams. Boris and Yuri illustrate animals common in their native countries (<i>Types of extensions: level of support, motivation, demonstration of knowledge, participation, resources and materials</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1 - 2.6)</p>	<p>How do environments and organisms affect each other?</p>	<p>Students will understand that Life Science</p> <ul style="list-style-type: none"> • organisms' patterns of behavior are related to environments. • all animals depend on plants. • organisms change the environment. <p>Students will Scientific Inquiry</p> <ul style="list-style-type: none"> • ask simple scientific questions. • use simple equipment, tools, skills, technology, and mathematics. • use evidence to develop reasonable explanations. • design and conduct different kinds of simple scientific investigations. • communicate designs, procedures, and results. • review and ask questions about scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • distinguish between natural objects and objects made by humans. • recognize how science helps to understand populations. • examine how science fosters understanding of natural resources. • demonstrate how science helps explain changes in environments. • examine the role science plays in everyday life.

Grade 4 Science Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • design simple comparative tests to determine organisms (e.g., plants, animals) preferences (e.g., heat, temperature, moisture). Collect, record, and analyze data for a specific variable and share with class. Use class data to draw conclusions as to types of environments best for certain organisms. Establish terraria or aquaria systems that model different environments based on conclusions from the previous activity. Observe and maintain throughout the year. Design booklets, brochures, or posters that focus on a plant or animal and type of environment or care required for it. Post by the terraria or aquaria and share. • observe, illustrate, and describe simple food chains and webs, differentiating between predator and prey relationships and producers and consumers by adopting small (e.g., 1 foot square) areas of land in various locations at schools. Create public service announcements indicating importance of various organisms in and around schools. • use secondary data (e.g., books, Internet, magazines) to compare characteristics and habits of organisms which live in different environments (e.g., grassland, desert, rainforest). Consider effects of introducing or reintroducing organisms into new environments (e.g., elk in Eastern Kentucky). Create brochures to outline possible benefits or risks to local regions. 	<p>Alexis and Kevin read phonetically and use some contextual cues. They continue to develop more efficient strategies to construct meaning from what they are reading. Their teacher uses “guided reading” strategies to help them construct meaning of print materials as they read books, magazines, and Internet material on characteristics and habits of organisms living in different environments. The teacher adjusts the performance standards for this activity (<i>Types of extensions: purpose and appropriateness, procedures and routines, participation, demonstration of knowledge</i>).</p>

Grade 5 Science
Model I: Physical Science

NOTES

Grade 5 Science

Model I: Physical Science

Course Overview:

Students will develop conceptual understandings of physical science through using scientific inquiry. In this course, students will experience physical science concepts of properties and changes of properties in matter, motions and forces, and transfer of energy. A scientific inquiry approach uses concrete hands-on experiences that requires students to apply critical thinking skills. For each guiding question, students will apply and connect scientific concepts to real life.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- How can I investigate characteristic properties of substances and changes of properties in substances?
- How can I investigate motions of objects and how forces affect motions of objects?
- How does energy move from one place to another?

Grade 5 Science
Model I: Physical Science

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1-2.6)</p>	<p>How can I investigate characteristic properties of substances and changes of properties in substances?</p>	<p>Students will</p> <p>Physical Science</p> <p>Properties and Changes of Properties in Matter</p> <ul style="list-style-type: none"> • investigate characteristic properties of substances. • examine chemical reactions between substances. • recognize how elements combine to produce compounds. <p>Scientific Inquiry</p> <ul style="list-style-type: none"> • identify and refine questions. • use appropriate equipment, tools, techniques, technology, and mathematics. • use evidence, logic, and scientific knowledge. • design and conduct different kinds of scientific investigations. • communicate designs, procedures, and results. • review and analyze scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • demonstrate the role science plays in everyday life and explore different careers in science. • recognize that science is a process.

Grade 5 Science
Model I: Physical Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> investigate properties of substances (e.g., color, texture, hardness, melting point, boiling point, magnetic character), organize data into tables, and use information to physically separate mixtures of substances. Make iced tea, then analyze the properties of the substances used to make iced tea. Produce consumer information pamphlets about properties of substances and mixtures of substances commonly found in homes. Distribute pamphlets to local home extension agents. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> observe that mass remains constant before, during, and following chemical reactions. Place balloon, small beaker with 15 mL of water, and half an effervescent tablet on balance and measure mass. Then place water and tablet in balloon, seal balloon, allow water and tablet to react while on balance, and continue to monitor mass. Report observations and explanations. Base explanations on evidence, logic, and scientific knowledge. recognize that elements do not break down. Produce word equations for chemical reactions. Identify starting substances and substances produced by their constituent elements (e.g., paper [carbon] plus oxygen yields carbon dioxide). Display equations on classroom bulletin board. 	<p>Bryan can organize information when a specified pattern and visual guide is provided. For this activity, Bryan will use a preprinted data chart to be used for collecting data for separating mixtures (<i>Types of extensions: procedures and routines, resources and materials</i>).</p> <p>Dixon, who plans to become a chemist, has a sophisticated chemistry set at home. Dixon will work with a high school chemistry teacher as a mentor during this unit to help design a chemistry project. Dixon will consult with the gifted and talented consultant as he writes his scientific paper describing the project (<i>Types of extensions: purpose and appropriateness, complexity, magnitude, pace, environment, level of support</i>).</p>

Grade 5 Science
Model I: Physical Science

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1-2.6)</p>	<p>How can I investigate motions of objects and how forces affect motions of objects?</p>	<p>Students will Physical Science Motions and Forces</p> <ul style="list-style-type: none"> • describe, measure, and represent an object's motion. • investigate forces and the effect on an object's motion. <p>Scientific Inquiry</p> <ul style="list-style-type: none"> • identify and refine questions. • use appropriate equipment, tools, techniques, technology, and mathematics. • use evidence, logic, and scientific knowledge. • design and conduct different kinds of scientific investigations. • communicate designs, procedures, and results. • review and analyze scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • use scientific inquiry and conceptual understandings to design technological solutions to problems. • examine the interaction between science and technology. • demonstrate the role science plays in everyday life and explore different careers in science. • recognize that science is a process.

Grade 5 Science
Model I: Physical Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • measure “distance traveled”, “time for trip”, and mathematically calculate average speed for several real trips (e.g., walk or run around school building, ride bike from home to a convenient store). Collect “distance” and “time” data numerous times during trips, graph distance versus time for each trip, and use slope of line to find average speed for each trip. Produce written explanations of two ways to determine average speed. <p><i>Technology suggestion: Use integrated software package to record data on spreadsheets and create graphs.</i></p> <ul style="list-style-type: none"> • investigate and compare systems that have balanced forces (e.g., toy car sitting on table) and systems with unbalanced forces (e.g., toy car moving down slope). Design experiments to investigate influence of different slopes on motions of toy cars. Report results of this inquiry lab and describe the forces on toy cars that have increasing speeds. Distribute reports to the local boy scouts before pine box derby (<i>WP-Transactive</i>). <p><i>Technology Suggestion: Use photogates and integrated software package to record data on spreadsheets and create graphs.</i></p>	<p>Julie understands concepts of graphing and use of graphs to represent information. However, she has difficulty with fine motor skills, such as holding pencils, moving rulers, and drawing straight lines. For this activity, allow Julie to use computer software to construct distance versus time graphs (<i>Types of extensions: resources and materials, demonstration of knowledge</i>).</p> <p>George, Lisa, and Jeremy demonstrated knowledge of concepts in a pretest on motion and forces. They will design and construct toy cars powered by mousetraps that will complete a course, including up and downhill slopes, in a specified time. They will explain their designs and principles of motion and forces they applied during construction (<i>Types of extensions: purpose and appropriateness, complexity, resources and materials, motivation, participation, level of support, demonstration of knowledge</i>).</p>

Grade 5 Science
Model I: Physical Science

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1-2.6)</p>	<p>How does energy move from one place to another?</p>	<p>Students will</p> <p>Physical Science</p> <p>Transfer of Energy</p> <ul style="list-style-type: none"> • demonstrate that energy is a property. • observe forms of energy transfer. • observe the ways heat can move. • recognize that the sun’s energy arrives as light. • observe how electrical circuits transfer electrical energy. <p>Scientific Inquiry</p> <ul style="list-style-type: none"> • identify questions. • use appropriate equipment, tools, techniques, technology, and mathematics. • use evidence, logic, and scientific knowledge. • design and conduct different kinds of scientific investigations. • communicate designs, procedures, and results. • review and analyze scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • demonstrate the role science plays in everyday life and explore different careers in science. • recognize that science is a process. • explore scientific discoveries.

Grade 5 Science
Model I: Physical Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • demonstrate that substances have energy. Burn pieces of paper and observe heat, light, and sound that is produced. Describe where heat, light, and sound energy go after they leave the paper. Create labeled drawings of observations in student learning logs. Write articles and use the labeled drawings to demonstrate that substances have energy. Publish articles in school newspaper (<i>WP-Transactive</i>). • observe forms of energy transfer. Take photographs or videos of different substances that possess energy such as moving carts (kinetic energy), steam (thermal energy), carts on platforms (potential energy), and apple (chemical energy). Present findings to PTA or school council. <p>Technology suggestion: <i>Create multimedia presentations of findings using photographs or videos.</i></p> <ul style="list-style-type: none"> • indirectly observe heat moving. Measure temperature of glass of water from water faucet, measure temperature of freezer compartment of refrigerator then place ice cubes into glass of water and measure temperature every 5 minutes for next 60 minutes. Graph temperature versus time and use graph to determine final temperature of mixture. Produce explanations of how heat energy moved from warmer objects to cooler objects and describe variables that affected how much heat energy was transferred. Produce brochures to be distributed to home owners by home extension agents about moving heat energy in homes (<i>WP-Transactive</i>). <p>Technology suggestion: <i>Use integrated software package to record data on spreadsheets and create graphs.</i></p> <ul style="list-style-type: none"> • observe the Sun's energy. Use spectroscopes, prisms, or diffraction gratings to observe various wavelengths of light produced by the Sun. Produce colored charts comparing wavelengths from the Sun to wavelengths from other light sources (e.g., incandescent, fluorescent). Use colored charts for class activity identifying light from unknown sources. • observe energy transfer in electrical circuits. Construct electrical circuits with batteries and wires and try to light one bulb using different arrangements. Draw labeled diagrams of arrangements that successfully light one bulb and produce written explanations for why the arrangements were successful. Create folder games (manila folders with simple circuits inside and bulbs and connector wires outside. Find correct answer (e.g., sports stats, state capitals) by completing circuits and light one bulb. 	<p>Cy and Lee draw objects with great detail and accuracy. Each has difficulty with writing and working in small peer groups. One of their goals is to improve social skills while working in groups. During this activity, contract with Cy and Lee for appropriate group behavior, using a menu of reinforcers attached to specific desired behaviors. In addition, allow each one to be a team leader for drawing diagrams of electrical circuits (<i>Types of extensions: participation, motivation, complexity, level of support, demonstration of knowledge</i>).</p> <p>A KWL chart activity on energy indicates a group of students already possesses a high degree of knowledge about energy. These students have expressed interest in learning more about nuclear energy. The students will examine nuclear power and its impact on society in relation to waste. The group will then produce a video about their predictions of effects of nuclear power and nuclear waste on society (<i>Types of extensions: purpose and appropriateness, complexity, magnitude, pace, order of learning, procedures and routines, demonstration of knowledge, participation, motivation</i>).</p> <p>Vanya is proficient in her native language but has beginning English language skills. Her teacher helps her construct a semantic web to develop her understanding of vocabulary. She uses a dialog journal to communicate with her teacher. Working with a peer tutor, Vanya will observe the activity and produce labeled charts and diagrams using acquired vocabulary (<i>Types of extensions: purpose and appropriateness, participation, level of support, procedures and routines, order of learning, demonstration of knowledge</i>).</p>

Grade 5 Science
Model II: Integrated Science

NOTES

Grade 5 Science

Model II: Integrated Science

Course Overview:

Students develop a conceptual understanding of each guiding question through using scientific inquiry. In this course, students experience transfer of energy, structure of the Earth system, and structure and function in living systems. A scientific inquiry approach uses concrete hands-on experiences that requires students to apply critical thinking skills. For each guiding question, students apply and connect scientific concepts to real life.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are the questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- How does energy move from one place to another?
- What are the components and structure of the Earth system?
- What are the functions of different structures in living systems?

Grade 5 Science
Model II: Integrated Science

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1-2.6)</p>	<p>How does energy move from one place to another?</p>	<p>Students will</p> <p>Physical Science</p> <p>Transfer of Energy</p> <ul style="list-style-type: none"> • demonstrate that energy is a property. • observe forms of energy transfer. • observe the ways heat can move. • recognize that the sun’s energy arrives as light. • observe how electrical circuits transfer electrical energy. <p>Scientific Inquiry</p> <ul style="list-style-type: none"> • identify questions. • use appropriate equipment, tools, techniques, technology, and mathematics. • use evidence, logic, and scientific knowledge. • design and conduct different kinds of scientific investigations. • communicate designs, procedures, and results. • review and analyze scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • demonstrate the role science plays in everyday life and explore different careers in science. • recognize that science is a process. • explore scientific discoveries.

Grade 5 Science

Model II: Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> demonstrate that substances have energy. Burn pieces of paper and observe heat, light, and sound that is produced. Describe where heat, light, and sound energy go after they leave the paper. Create labeled drawings of observations in student learning logs. Write articles and use the labeled drawings to demonstrate that substances have energy. Publish articles in school newspaper. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> observe forms of energy transfer. Take photographs or videos of different substances that possess energy such as moving carts (kinetic energy), steam (thermal energy), carts on platforms (potential energy), and apple (chemical energy). Present findings to PTA or school council. <p>Technology suggestion: <i>Create multimedia presentations of findings using photographs or videos.</i></p> <ul style="list-style-type: none"> indirectly observe heat moving. Measure temperature of glass of water from water faucet, measure temperature of freezer compartment of refrigerator then place ice cubes into glass of water and measure temperature every 5 minutes for next 60 minutes. Graph temperature versus time and use graph to determine final temperature of mixture. Produce explanations of how heat energy moved from warmer objects to cooler objects and describe variables that affected how much heat energy was transferred. Produce brochures to be distributed to home owners by home extension agents about moving heat energy in homes (WP-Transactive). <p>Technology suggestion: <i>Use integrated software package to record data on spreadsheets and create graphs.</i></p> <ul style="list-style-type: none"> observe the Sun's energy. Use spectroscopes, prisms, or diffraction gratings to observe various wavelengths of light produced by the Sun. Produce colored charts comparing wavelengths from the Sun to wavelengths from other light sources (e.g., incandescent, fluorescent). Use colored charts for class activity identifying light from unknown sources. observe energy transfer in electrical circuits. Construct electrical circuits with batteries and wires and try to light one bulb using different arrangements. Draw labeled diagrams of arrangements that successfully light one bulb and produce written explanations for why the arrangements were successful. Create folder games (manila folders with simple circuits inside and bulbs and connector wires outside. Find correct answer (e.g., sports stats, state capitals) by completing circuits and light one bulb. 	<p>Ralph draws objects with great detail and accuracy. He has difficulty with writing and working in small peer groups. One of his goals is to improve social skills while working in groups. During this activity, contract with Ralph for appropriate group behavior, using a menu of reinforcers attached to specific outcome behaviors. In addition, allow Ralph to be team leader for drawing diagrams of electrical circuits (<i>Types of extensions: participation, motivation, complexity, level of support, demonstration of knowledge</i>).</p> <p>A KWL chart activity on energy indicates a group of students already possesses a high degree of knowledge about energy. These students have expressed interest in learning more about nuclear energy. The students will examine nuclear power. The group will produce a video about the effects of nuclear power and nuclear waste on society (<i>Types of extensions: purpose and appropriateness, complexity, magnitude, pace, order of learning, procedures and routines</i>).</p> <p>Mei-lin, from mainland China, fluently speaks, reads, and writes Mandarin Chinese and has intermediate English language skills. She still needs support to understand and comprehend verbal and written English. Mei-lin uses semantic maps to develop vocabulary and show relationships among concepts. She works with a peer to review her work and then conferences with the teacher (<i>Types of extensions: resources and materials, procedures and routines, level of support</i>).</p>

Grade 5 Science
Model II: Integrated Science

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1-2.6)</p>	<p>What are the components and structure of the Earth system?</p>	<p>Students will Earth/Space Science Structure of the Earth System</p> <ul style="list-style-type: none"> • model the water cycle. • explore how the water cycle affects the atmosphere. • investigate living organisms' effects on the Earth system. <p>Scientific Inquiry</p> <ul style="list-style-type: none"> • identify questions. • use appropriate equipment, tools, techniques, technology, and mathematics. • use evidence, logic, and scientific knowledge. • design and conduct different kinds of scientific investigations. • communicate designs, procedures, and results. • review and analyze scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • recognize how science is used to understand populations, resources, and environments. • examine the role of science in explaining and predicting natural events. • demonstrate the role science plays in everyday life and explore different careers in science. • recognize that science is a process. • explore scientific discoveries

Grade 5 Science
Model II: Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • examine components of water cycle. Research and construct physical models of local rivers' or streams' drainage patterns. Display models at local Agricultural Soil Conservation Service (ASCS) offices. • explore how the water cycle affects the atmosphere. Write articles describing path of one drop of water as it moves through the water cycle, noting where it remains longest time. • investigate humans' effects on the atmosphere. Construct devices for collecting airborne particles. Collect data over several days. Produce written explanations, conclusions, and possible causes that are supported by data. Produce and write script for video to be broadcast on local cable TV network channel (<i>WP-Transactive</i>). <p>Technology suggestion: Use integrated software package to record data in databases.</p>	<p>Tammy can verbally describe and draw accurate representations of what she knows. She has difficulty getting her thoughts into a cohesive written format. She uses inventive spelling and is focusing on spelling words that contain vowel blends. Her teacher uses words related to the water cycle and the atmosphere to develop her spelling skills. She keeps a learning which includes targeted words. For this activity, Tammy will create an audio tape that describes the drop's path as it moves through the water cycle and draw corresponding representations (<i>Types of extensions: resources and materials, procedures and routines, demonstration of knowledge</i>).</p> <p>Tracy and Jeff need opportunities to develop contacts with practicing scientists to support and help sustain their high level of ability and interest in science. They will contact EPA to set up a research project involving points in the water cycle where various pollutants enter and how they can be controlled or eliminated. They will share their findings in a multimedia presentation for their classmates (<i>Types of extensions: purpose and appropriateness, complexity, environment, resources and materials, motivation, participation, demonstration of knowledge</i>).</p>

Grade 5 Science
Model II: Integrated Science

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Scientific Ways of Thinking and Working, Patterns, Systems, Scale and Models, Constancy, and Change Over Time (2.1-2.6)</p>	<p>What are the functions of different structures in living systems?</p>	<p>Students will Life Science Structure and Function in Living Systems</p> <ul style="list-style-type: none"> • recognize the relationship between structure and function. • recognize that cells carry on functions needed to sustain life. <p>Scientific Inquiry</p> <ul style="list-style-type: none"> • identify questions. • use appropriate equipment, tools, techniques, technology, and mathematics. • use evidence, logic, and scientific knowledge. • design and conduct different kinds of scientific investigations. • communicate designs, procedures, and results. • review and analyze scientific investigations. <p>Applications/Connections</p> <ul style="list-style-type: none"> • recognize how science is used to understand populations, resources, and environments. • demonstrate the role science plays in everyday life and explore different careers in science. • recognize that science is a process.

Grade 5 Science
Model II: Integrated Science

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • examine elements used for classification (e.g., structure, function) of plants and animals. Compare body plans (e.g., segmentation, symmetry) and other features (e.g., number of appendages) of animals. Compare features of plants (e.g., roots, stems, nodes). Write articles comparing elements used for classification for local plants and animals. Submit articles to <i>Kentucky Native Plant Society (WP-Transactive)</i>. • observe basic cell structure and construct cell models including cell parts. Compare cell models with abnormal (e.g., cancerous) cells. <p>Technology suggestion: <i>Research abnormal cells via Internet.</i></p>	<p>Beth understands concepts when they are presented in simple concrete formats and applied to real-life situations. For this activity, provide Beth with simple definitions that relate to real-life items. Give Beth additional time to learn vocabulary and construct her models of the cell. Allow her to use real-life examples to demonstrate her knowledge (<i>Types of extensions: level of support, time, resources and materials, procedures and routines, demonstration of knowledge</i>).</p> <p>Mario, Seth, and Mary have shown high levels of mastery during a living systems pretest. These students will work with the gifted and talented consultant and selected community members to research issues such as genetic cloning and then predict possible impacts on society. Students will share their completed projects with community members and publish in local newspapers or similar publications (<i>Types of extensions: purpose and appropriateness, complexity, pace, environment, order of learning, demonstration of knowledge, participation, motivation</i>).</p>

Science Glossary

Biodiversity: The diversity of different species and the genetic variability among individuals within each species.

Biogeographical realms: Major regions of the Earth with distinctive flora and fauna.

Biomass: The dry weight of organic matter comprising a groups of organisms in a particular habitat.

Biome: One of the world's major communities, classified according to the predominant vegetation and characterized by adaptations of organisms to that particular environment.

Calorie: A unit equivalent to the large calorie expressing heat-producing or energy-producing value in food when oxidized in the body.

Circannual behaviors: Behaviors that occur regularly at about one-year intervals.

Circadian rhythms: A sequence of behaviors that occur regularly at about 24-hour intervals.

Crepuscular: Appearing or active in the twilight.

Diffraction grating: Usually a glass or polished metal surface having a large number of very fine parallel grooves or slits cut in the surface and used to produce optical spectra by diffraction of transmitted or reflected light.

Diorama: A scenic representation in which sculptured figures and lifelike details are displayed usually in miniature so as to blend indistinguishably with a realistic painted background.

Diurnal: Active by day.

Electrophoresis: A technique used to sort proteins according to their responses in electric fields.

Emission-free: Does not discharge polluting substances into air.

Eukaryote: An organism having cells with well-defined nuclei.

Flex cam: A lightweight, high resolution video camera and lens mounted on a flexible wand.

Genetic engineering: Scientific activities that develop desirable characteristics in organisms by altering genes or inserting new genes in organisms' cells.

Genotype: The genetic makeup of an organism.

Geochemical cycles: A variety of cycles that connect and continually circulate energy and material through the components of the earth system.

Science Glossary

Geographic tools: Maps, globes, and other items used to document natural features, or populations of regions.

Geothermal energy: Energy of or relating to the heat of the earth's interior.

Human genome project: Began in 1990, the U.S. Human Genome Project is a 15-year effort coordinated by the U.S. Department of Energy and the National Institutes of Health to:

- Identify all the estimated 80,000 genes in human DNA.
- Determine the sequences of the 3 billion chemical bases that make up human DNA, store this information in databases, and develop tools for data analysis.

Hydroponics: The cultivation of plants by placing their roots in liquid nutrient solutions.

Incandescent lamp: An electric lamp in which a filament gives off light when heated to incandescence by an electric current.

Lycopodium powder: A fine yellowish flammable powder composed of spores from any of a large genus (*Lycopodium*) of erect or creeping club mosses with evergreen one-nerved leaves in four to many ranks.

Melanism: An increased amount of black or nearly black pigmentation of an organism.

Mendelian inheritance: A model or mechanism of inheritance documented by Gregor Mendel.

Meteorologist: One who studies atmosphere and its phenomena (climate, weather).

Multiple allelic inheritance or trait: Inheritance pattern or trait controlled by three or more alleles of the same gene that codes for a single trait.

New Madrid Fault System: A series of faults beneath the continental crust in a weak spot known as the Reelfoot Rift. The fault system extends 150 miles southward from Cairo, Illinois through New Madrid, Missouri to Marked Tree, Arkansas.

Nocturnal: Active at night.

Operating systems: Mechanical, fluid, electrical and thermal systems used in modern technology.

Organogenesis: An early period of rapid embryonic development in which organs take form from primary germ layers.

Passive solar house: A house designed to receive and store the solar heat during the cool winter months. The design takes advantage of the sun's position.

Pedigree: A family record that shows how a trait is inherited over several generations.

Science Glossary

Phenotype: The physical and physiological traits of organisms.

Photogate: An electronic device having an electrical output that varies in response to light.

Phototransistor: A transistor having highly photosensitive electrical characteristics.

Phylogenetic tree: A visual model of the inferred evolutionary relationships among organisms.

Polygenic inheritance: An additive effect of two or more genes on a single phenotypic character.

Probe: A device used to penetrate or send back information.

Prokaryote: A cellular organism the nucleus of which has no limiting membrane.

Seismograph: Any of various instruments for measuring and recording vibrations of earthquakes.

Spectra: Plural form of spectrum.

Spectroscope: An instrument for forming and examining optical spectra.

Spectrum: A series of images formed when a beam of radiant energy is subjected to dispersion and brought to focus so that the component waves are arranged in the order of their wavelengths (as when a beam of sunlight that is refracted and dispersed by a prism forms a display of colors).

Spin-offs : Derived products or effects as result of another project or program.

Stellar parallax: An apparent change in the direction of a star, caused by a change in observed position that provides a new line of sight.

Tempering: To harden metal by reheating and cooling.

Transactive reading: Reading for authentic purposes and audiences beyond completing assignments.

Transactive writing: Writing produced for authentic purposes and audiences beyond completing assignments to demonstrate learning.

Turbid: Not clear or transparent because of stirred-up sediment or the like; clouded; opaque.

Viscosity: The property of a fluid or semifluid that enables it to develop and maintain an amount of shearing stress dependent upon the velocity of flow and then to offer continued resistance to flow.

Watershed: Entire area of land that drains into rivers.

Social Studies

Grade 4 Social Studies

Model I

Course Overview

This model of fourth-grade social studies is an integrative exploration of Kentucky studies and regions of the United States. Students investigate a wide range of political, cultural, geographic, and historical issues relative to Kentucky's development. Students also investigate the same issues in regard to the regions of the United States. With a strong understanding of these issues, students will be equipped to understand the past, analyze the present, and plan for the future.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?
- How did culture and social institutions impact the development of Kentucky and regions of the United States?
- How did economic issues impact the development of Kentucky and regions of the United States?
- What impact did geography play in the development of Kentucky and regions of the United States?
- How did Kentucky get to be the way it is today?

Grade 4 Social Studies

Academic Expectations	Guiding Questions	Correlations to Program of Studies
<p style="text-align: center;">Government and Civics (2.14, 2.15)</p>	<p>What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand the basic purposes of government in Kentucky including the establishment and maintenance of order, the protection of rights of individuals, and the promotion of the common good. • recognize the three levels of government. • identify the branches of government at each level and recognize the offices associated with the branches. • understand that individuals have rights and responsibilities that change when people assume different roles in different groups. • recognize that, in a democratic society, individuals need to participate in government and civic affairs.

Grade 4 Social Studies

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • conduct surveys (e.g., e-mail, oral interview, regular mail) of community members or pen pals to determine what people think the purpose of government should be. Analyze findings and present to local government officials. • create bulletin boards, posters, or charts with the three levels of government (local, state, national) and list functions of each (e.g., create laws, maintain order, collect taxes). Discuss what would happen if functions and duties were drastically altered (e.g., only local government could create laws; the national government had no money for maintenance or construction of Interstate Highway Systems). Present findings to class. • examine branches of government (legislative, judicial, executive) and the offices associated with them (e.g., president, mayor, governor). Write job descriptions for the various offices and compare. • create mini-dramas about an average fourth grader and their rights and responsibilities in different roles and in different groups (e.g., son or daughter in a family; president of 4-H Club; class secretary; member of the soccer team). Relate rights and responsibilities to those of a citizen in a democracy. Write editorials for class or school newspaper about responsibilities of citizenship than students should assume (<i>WP-Transactive</i>). • create posters using the slogan “Uncle Sam NEEDS You.” Include information on why it’s important for individuals to participate in government and civic affairs. 	<p>Kim researches one level of government and investigates one of its functions. Kim will work with a peer tutor to create a poster and develop her presentation to class (<i>Types of extensions: complexity, magnitude, level of support</i>).</p> <p>Nadia has difficulty interpreting written texts. However, she is an excellent English speaker. Using storyboarding, Nadia will conceptualize, organize and plan a mini-drama script. After conferencing with her teachers and making revisions, Nadia will follow outline and write the script (<i>Type of extension: level of support</i>).</p> <p>To introduce this model and develop connections for all students, the teacher uses the Unit and Lesson Organizer Routines, (University of Kansas Center for Research on Learning) (<i>Types of extensions: procedures and routines, level of support, order of learning, motivation</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Culture and Society (2.16 2.17)</p>	<p>How did culture and social institutions impact the development of Kentucky and regions of the United States?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand similarities and differences in the ways groups and cultures within Kentucky and regions of the United States address similar needs and concerns. • recognize the elements of culture using different groups from Kentucky's past and regions of the United States as examples. • understand how social institutions in Kentucky's past and regions of the United States respond to human needs, structure society, and influence behavior. • recognize how tensions and conflict can develop between and among individuals, groups, and institutions. • analyze strategies and ways to achieve conflict resolution.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • research different cultures in Kentucky and regions of the United States to understand how they address similar needs and concerns. Create illustrated books demonstrating how different cultures address needs and concerns. • research elements of culture (e.g., food, art, music, dress) to determine their significance to different cultures in Kentucky and regions of the United States. Create bulletin boards, posters, or multimedia presentations to present findings. • research specific social institutions (e.g., government, economy, education, religion, family) to understand how institutions have responded to human needs. Create a top-ten list of the ways that social institutions make life better or help people. • create a top-ten list of the reasons why conflict can occur among individuals and groups. Create another top-ten list of the best ways to resolve conflict. Create multimedia presentations for other classes or schools. 	<p>April participated in services for intellectually gifted students at her former school. Her father has been transferred many times in the last few years. As a result, April has had many experiences with different cultures. Allow April to act as a consultant for other groups. In addition, ask April to create a multimedia presentation for her class showing similarities and differences among the cultures she has experienced (<i>Types of extensions: motivation, participation, purpose and appropriateness</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Economics (2.18)</p>	<p>How did economic issues impact the development of Kentucky and regions of the United States?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand the basic economic problem of scarcity (imbalance between unlimited wants and limited resources) and recognize how people have addressed the problem through decision making. • understand that producers create goods and services and consumers make economic decisions and choices. • understand economic concepts and use them appropriately in context to explain conditions or events in Kentucky history and regions of the United States. • recognize that economic systems are created to deal with the problem of scarcity.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create posters illustrating scarcity (e.g., money, clothes, space, time) in their lives. Explain in journals how these problems were solved using appropriate decision-making skills. • create posters or bulletin boards using magazine pictures to illustrate differences between goods and services. Conduct surveys concerning products for which there are many available substitutes (e.g. different kinds of toothpaste, different kinds of soft drinks, different kinds of tennis shoes). Design surveys with four to six questions concerning choice of brand names (e.g. Which tennis shoe is most comfortable?, Which tennis shoe costs the most?, Which tennis shoe is the best looking?). Design consumer guides for students to use when selecting products. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> <p>Technology suggestion: <i>Use desktop publishing to create consumer guides.</i></p> <ul style="list-style-type: none"> • conduct a pizza market survey (e.g., How much would students be willing to pay per slice?; How many slices would a store be willing to provide at different prices?). Write letters to managers of pizza parlors explaining results of survey and suggesting changes to menus or prices (WP-Transactive). • divide into groups and create products from provided resources (e.g., newspapers, scissors, markers, staplers, rulers). Create an economic system (a way people decide to organize production and consumption) by design what to produce, how to produce it, and who will receive finished products. Describe scarcity problems encountered and how these problems were solved. 	<p>Danielle, with assistance from a peer, finds photographs and illustrations representing the concept of scarcity for her poster. She illustrates in her picture journal how she would solve these problems in her daily life (<i>Types of extensions: resources and materials, level of support, complexity</i>).</p> <p>Clay organizes and translates his thoughts in writing similar to same age peers. He needs support for staying on task, assignment completion. Prior to create products from provided resources, Clay develops a chart with his teacher for taking data on staying on task and assignment completion and teaches other students who need assistance with these areas. With assistance he develops a problem solving routine to use in group situations. He trains his teachers on how to collect data. His data collection device replaces the current one that teachers are using to collect ongoing progress data (<i>Types of extensions: purpose and appropriateness, application and demonstration of knowledge, level of support, motivation</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Geography (2.19)</p>	<p>What impact did geography play in the development of Kentucky and regions of the United States?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand that all places on Earth have an absolute and relative location. • recognize the five themes of geography (location, place, regions, movement, and relationships within places) and use them to analyze geographic issues and problems in Kentucky and regions of the United States. • use various representations of the Earth to find and explain human and physical geographic features in Kentucky and regions of the United States. • understand how humans have interacted with the physical environment to meet their needs in Kentucky and regions in the United States. • recognize how the physical environment, especially in the past, limited and promoted human settlement and activities in Kentucky. • use a variety of tools to obtain and present geographic information about the United States and its close neighbors (i.e., Canada, Mexico). • develop mental maps of the United States and its regions. • recognize unique places in regions of the United States.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create historical and thematic maps of Kentucky (e.g., landform, population, natural resources, crop production) to show locations of various activities and occurrences over time. • write directions on how a student could visualize different mental maps (e.g., “Pretend you’re floating over your neighborhood and can see all the houses and streets”; “Pretend your house has no roof and you’re a bird looking down and seeing all the rooms and hallways”). Apply this technique to create a mental map of Kentucky and regions the United States. Discuss how mental maps can be helpful. • use written and visual information to create a list of the most unique places in Kentucky. Categorize the places into those with physical characteristics (e.g., Cumberland Falls, Natural Bridge) and those with human-made characteristics (e.g., state universities, Jefferson Davis Monument, Louisville Zoo). Create travel brochures of unique places with some brochures focusing on physical characteristics and others focusing on human-made characteristics. <p><i>Technology suggestion: Use desktop publishing and draw programs to create brochures.</i></p> <ul style="list-style-type: none"> • create illustrated time lines of the history of Kentucky. Highlight specific geographic conditions, events, and occurrences that had significant impact on the development of Kentucky. • create population maps of Kentucky for the time periods 1792, 1850, 1930, and 1998. Present maps to the class with an explanation of why and how the population changed or shifted over time. • examine written and visual information to understand how technology has been used to modify the environment of Kentucky over time (e.g., dams, road systems, agricultural machines, buildings, settlements). Give oral presentations on the benefits of the modifications but also address negative consequences. 	<p>Barbara is a skilled artist. She has won awards in her age group at community art shows and helps her mother after school in her gallery. She will conduct a tour of her mother’s gallery for her classmates explaining aspects of composition use of color, etc. of the gallery display (<i>Types of extensions: demonstration of knowledge, motivation, participation, magnitude</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Historical Perspective (2.20)</p>	<p>How did Kentucky get to be the way it is today?</p>	<p>Students will</p> <ul style="list-style-type: none"> • develop a chronological understanding of Kentucky’s early development as a territory and state. • explore different perspectives and interpretations of Kentucky history by using primary and secondary sources, artifacts, and time lines. • examine cause-and-effect relationships for events in Kentucky history and understand that some events had multiple causes. • understand different groups throughout Kentucky’s history and their reasons for exploring and/or settling in Kentucky. • recognize how life-styles and conditions have changed over time in Kentucky. • understand that specific symbols, slogans, buildings, and monuments represent ideas and events in Kentucky’s history.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create illustrated time lines of Kentucky’s early development as a territory and state. Focus on major events (e.g., early exploration, settlement, statehood) and important people (e.g., Daniel Boone, Simon Kenton, Christopher Gist, John Filson, Dr. Thomas Walker). • use primary and secondary sources (e.g., diaries, journals, illustrations, visual and written material) to examine different perspectives and interpretations of Kentucky history (e.g., Native Americans and settlers; settlement from a man’s perspective versus a woman’s perspective; Civil War period from slave and slave owner perspective). Role-play different perspectives of different events and time periods. • create a “domino-effect” game where the dominos are labeled as certain events, people, or occurrences from Kentucky’s history. Place the dominos in the correct order to show cause-and-effect relationships. • create posters with visual and written information on different people and groups and their reasons for exploring and/or settling in Kentucky. Focus on different time periods to illustrate reasons why people came and continue to come to Kentucky. • choose different periods in Kentucky history and investigate life-styles and conditions of the time. Write articles for a magazine titled “The Good Life in Kentucky.” Describe and illustrate the most desirable life-styles and living conditions of specific periods (<i>WP-Transactive</i>). • analyze Kentucky’s symbols and slogans to determine their significance. Create a new state seal, flag, and state song to represent current conditions. Share with other classes. 	<p>Shane is highly motivated. He is visually impaired and requires additional cues and supports. It takes him longer to complete assignments. His teacher uses auditory attention signals when transitioning from one activity to another or one instructional strategy into another. Allow Shane to construct his time line with only a few events, dark colored markers, and large print. Provide Shane with additional time (<i>Types of extensions: complexity, resources and materials, time</i>).</p> <p>Susan accesses printed materials with her low vision devices, but is unable to produce legible handwritten documents. She uses a portable notetaking device and/or a computer for written work. Access of the computer screen is through image enlargement combined with speech. Until mastery of her assistive devices is achieved, she uses audiotapes for her journal and written assignments. She accesses a computer in the classroom with adaptive software installed. She needs extended time to complete her assignments (<i>Types of extensions: time, resources and materials</i>).</p>

NOTES

Grade 5 Social Studies

Model I

Course Overview:

In model I, the fifth-grade course of study is an integrative exploration of the United States. Students investigate a wide range of political, cultural, geographic, and historical issues relative to the development of the United States. With a strong understanding of these issues, students will be equipped to understand the past, analyze the present, and plan for the future.

Models are organized around guiding questions. Guiding questions direct teachers' choices of activities and are questions students should be able to answer at the end of the course. Pages of models are arranged in pairs. On the left-hand page of each pair are guiding questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding Questions:

- What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?
- How did culture and social institutions impact the development of the United States?
- How did economic issues impact the development of the United States?
- What impact did geography play in the development of the United States?
- Why is the United States the way it is?

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Academic Expectations	Guiding Questions	Correlations to Program of Studies
<p style="text-align: center;">Government and Civics (2.14, 2.15)</p>	<p>What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?</p>	<p>Students will</p> <ul style="list-style-type: none"> • recognize the basic purpose of democratic governments including the establishment of order, security, and the attainment of common goals. • understand that the Constitution of the United States establishes a government in which powers are shared among different levels and branches. • understand that, in a democratic society, citizens have rights and responsibilities. • explore the rights and responsibilities of citizens in real-life situations.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • assume role of presidential candidates and give detailed speeches on the basic purpose of a democratic government. Address issues such as the establishment of order, security, and working toward common goals. Choose the best ideas from all speeches and place on posters titled, “Purpose of Government.” • apply principle of “checks and balances” to a family or schools. Create charts that show who holds the power (more than one person will have some type of power). Show how the different people with power are “checked and balanced” by others. Compare to the “checks and balances” in the federal government. • participate in discussions concerning the rights and responsibilities of citizens. Conduct mock school meetings regarding the creation of rules for their playground. Take turns speaking before the group and presenting suggestions. List responsibilities that accompany the right to speak publicly (e.g., the way you speak, what you say, listening to other people’s opinions). Discuss what might happen to free speech if no one chose to participate in public meetings. • discuss beliefs people have about basic rights/natural rights (e.g., the right to life, liberty, and property). List the rights they think they should have in a school setting (e.g., classroom, cafeteria, hallway, playground) and explain why it is important to have these rights. Compile top ten choices for the most important choices. Conduct school surveys using top ten choices and chart the results to see if other students agree. Present results to the principal, PTA or student council. Write editorials for school newspaper about a specific “top ten” right and the responsibilities involved with it (<i>WP-Transactive</i>). 	<p>Summer has tested significantly higher than her peers on a pretest of U.S. history topics. Allow Summer to read memoirs, journals, or diaries of historic figures to create speeches on the purposes of government (<i>Types of extensions: pace, order of learning</i>).</p> <p>Michael and Rose Marie like well defined routines, working independently, and frequent feedback. They often do not attempt new activities for fear of failure. They would rather not receive credit for an assignment than request assistance and attempt the assignment. The teacher meets with them and assists them with developing a step by step picture guide paired with written instructions to complete the activities which includes a check off place for each step. Michael and Rose Marie develop a goal for completing the activities. They review the steps involved and begin to identify areas where they feel they will need help or guidance. They schedule daily conference time with the teacher to check their progress and troubleshoot as they complete their assignment. The teacher uses the conference time for presenting mini lessons and determining additional instructional needs (<i>Types of extensions: level of support, procedures and routines, motivation, demonstration of knowledge</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Culture and Society (2.16 2.17)</p>	<p>How did culture and social institutions impact the development of the United States?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand how culture in the United States has been influenced by languages, literature, arts, beliefs, and behaviors of diverse groups. • recognize social institutions and their impact in the history of the United States. • examine social interactions among diverse groups in the history of the United States.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • role-play the U.S. Cabinet Secretary of Culture and describe ways the culture of the U.S. has been influenced by language, literature, arts, beliefs, and behaviors of diverse groups. Include descriptions in a report to be delivered to the President. • assume the identity of a social institution. Research that particular social institution and its impact on U.S. history. Give oral presentations concerning the significant contributions of that institution. As a class, vote on the social institution that has had the greatest impact overall. • research different social interactions occurring among different groups in U.S. history. Create bulletin boards, posters, or charts representing different interactions that have taken place in U.S. history. 	<p>The advanced cluster group of history students are allowed to choose their own learning paths for many U.S. history concepts. Robert, Roger, and Suzanne are mentored by historians at the university, while Ed and Jennifer are involved in a community problem solving competition project (<i>Types of extensions: environment, motivation, participation</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Economics (2.18)</p>	<p>How did economic issues impact the development of the United States?</p>	<p>Students will</p> <ul style="list-style-type: none"> • recognize the impact of economic factors (e.g., security, growth, desire for profits) on decisions made by individuals, businesses, and governments in the United States. • examine basic components (e.g., taxes, goods and services provided by government) of the economic system of the United States. • trace changes over time in the economic system of the United States, including changes in the goods and services produced by United States workers and the impact of specialization.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • work in groups to discuss the impact of economic factors (e.g., security, growth, desire for profits) on decisions made by individuals, businesses, and governments in the U.S. Discuss the Boston Tea Party as an example of an economic conflict. Write editorials reflecting different perspectives of the Boston Tea Party. • role-play different sides of the “Give me more government” vs “Give me less government” argument. Focus on economic involvement of government, including taxes and government-provided goods and services. Debate the question, “Do we get what we pay for?” • create mini-dramas, from three different time periods (e.g., 1800, 1900, 1998), of a family discussing the questions “What do I need to live, and where will I get it?” Address basic issues of food, shelter, and entertainment. Show change over time in regard to more self-sufficiency (e.g., in 1800 most goods and services came from local sources) and current conditions (e.g., we now have many imported goods). 	<p>Herta moved to the United States from Germany four years ago. She is fluent in German and has intermediate English speaking listening, reading and writing skills. Other students in the class also need to further develop their reading fluency and learning of English. Prior to role playing and debating “more or less government”, the teacher uses captioned videos and TV programs illustrating “more and less government”. Herta and five other students first watch a program without captions or phrases in their learning logs writing the words as they hear them. The second time they watch the video with captions and watch for the words and phrases they did not know. They record the words and phrases again in their learning logs. After viewing the captioned program the teacher has the students illustrate the meaning of the words and phrases. Using the two questions for the activity, the students prepare written responses to the questions. They take turns role playing the responses to each question using targeted vocabulary and language structures (<i>Types of extensions: purpose and appropriateness, size, resources and materials, procedures and routines, participation</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Geography (2.19)</p>	<p>What impact did geography play in the development of the United States?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use a variety of tools to obtain and present geographic information (e.g., landforms, natural resources, natural disasters) about the United States and its close neighbors (i.e., Canada, Mexico). • develop mental maps of the United States. • recognize unique places in the United States. • examine how the history of the United States was influenced by its physical environment. • understand human settlement patterns in the United States and how they were related to the physical environment. • understand how the people of the United States have used technology to modify the environment to meet their needs.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create historical and thematic maps (e.g., landform, population, natural resources, crop production) to show locations of various activities and occurrences over time in the United States. • write directions on how a student could visualize different mental maps (e.g., “Pretend you’re floating over your neighborhood and can see all the houses and streets”; “Pretend your house has no roof and you’re a bird looking down and seeing all the rooms and hallways”). Apply this technique to creating a mental map of the United States. Discuss how mental maps can be helpful. • use written and visual information to create a list of the most unique places in the United States. Categorize the places into those with physical characteristics (e.g., Grand Canyon, Pikes Peak, Natural Bridge) and those with human characteristics (Mount Rushmore, Washington D.C., Times Square). Create travel brochures to places with some brochures focusing on physical characteristics and other brochures focusing on human characteristics. • create an illustrated time line of the history of the United States. Highlight specific geographic conditions, events, and occurrences that had significant impact on the development of the United States. • create population maps of the United States for the time periods 1776, 1840, 1900, 1930, and 1998. Present maps to the class with an explanation of why the population changed over time. 	<p>Gary will create a population map with large markers or cardboard shapes to accommodate for his fine-motor skills. Gary will need more time than other students to finish his map (<i>Types of extensions: resources and materials, complexity, time</i>).</p>

Grade 5 Social Studies

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Historical Perspective (2.20)</p>	<p>Why is the United States the way it is?</p>	<p>Students will</p> <ul style="list-style-type: none"> • explore the interpretive nature (how perceptions of people and passing of time influence accounts of historical events) of the history of the United States using a variety of tools (e.g., primary and secondary sources, data, artifacts). • develop a chronological understanding of the history of the United States and recognize cause-and-effect relationships and multiple causation. • recognize broad historical periods and eras of the history of the United States (i.e., Land and People before Columbus, Age of Exploration, Colonization, War for Independence, Young Republic, Westward Expansion, Industrialism, Twentieth Century). • trace change over time in the history of the United States and identify reasons for change. • examine the historical contributions of individuals and groups. • recognize the significance of important symbols, monuments, patriotic songs, poems, and written passages in the history of the United States. • recognize basic similarities and differences in the United States, Canada, and Mexico.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use primary and secondary sources to examine different interpretations of historical events in the United States. Work in groups and select different sources to study. Compare different perspectives. Write news articles illustrating comparisons. • create a “domino model” that demonstrates cause-and-effect relationships. After selecting an event from U.S. history, label the dominoes with appropriate headings and demonstrate cause-and-effect relationships. • review written and visual materials of historical periods and eras of United States history. Create time lines, posters, and bulletin boards that illustrate each period or era. • review resource materials on the Industrial Revolution. Debate the following statement, “The Industrial Revolution was good for the United States” • use resource materials to gather significant information regarding the life of Thomas Jefferson. Create a time line outlining important dates in his life. Create Jefferson silhouettes including important contributions he has made to the United States. Participate in trivia contests to reinforce these contributions. Write letters thanking him for his contributions. • analyze the historical significance of the poem/song the “Star Spangled Banner” and discuss reasons it became our national anthem. Write editorials with reasons for changing the anthem. • gather information on the physical and cultural characteristics of the countries of North America. Share lists of common characteristics of each country. Choose one characteristic from list to illustrate on class bulletin boards. 	<p>Andrea has good verbal and listening skills but has difficulty with organizing ideas and thought and staying on task. Her teacher posts assignments and rules around the classroom that help keep her focused on her work. Andrea also uses advance and post-organizers to complete tasks. Andrea’s teacher provides her with note cards containing directions and steps to analyze the “Star Spangled Banner” (<i>Types of extensions: resources and materials, procedures and routines, environment</i>).</p>

Grade 4 Social Studies

Model II: A Thematic Approach

In Model II, both years of intermediate social studies are organized around two guiding questions that students should be able to answer at the successful completion of each course. In grade four, these questions culminate students' study of Kentucky and regions of the United States. More significantly, the questions will assist students in recognizing the importance of history in determining who we are, why we are in Kentucky, and what our future may be.

Models are organized around guiding and essential questions. Essential questions direct teachers' choices of activities, and are the questions students should be able to answer as they study the different social studies' strands (government and civics, culture and society, economics, geography, historical perspective) included in this course.

Pages of models are arranged in pairs. On the left-hand page of each pair are guiding and essential questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding and Essential Questions:

Why is it important to study the history of Kentucky?

What have I learned about myself from my study of Kentucky?

- What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?
- As a citizen living in Kentucky, how do my local and state governments affect me? What are my rights and responsibilities as a citizen in Kentucky?
- How did culture and social institutions impact the development of Kentucky and regions of the United States?
- What is the culture of Kentucky? Does that describe my own personal culture?
- How did economic issues impact the development of Kentucky and regions of the United States?
- What is my own economic system? How do I earn money and how do I spend it? How do I make decisions on what to buy? How does living in Kentucky affect my economic decisions?
- What impact did geography play in the development of Kentucky and regions of the United States?
- Where do I live in Kentucky? How did I get here? How does the geography of where I live affect the things I do and the way I am?
- How did Kentucky get to be the way it is today?

Grade 4 Social Studies
Model II: A Thematic Approach

- Do I have family/ancestors who lived in Kentucky? Who were they? Where did they live and what did they do for a living? How has that influenced who I am?

Grade 4 Social Studies

Academic Expectations	Guiding Questions	Correlations to Program of Studies
<p style="text-align: center;">Government and Civics (2.14, 2.15)</p>	<p>What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?</p> <p>As a citizen living in Kentucky, how do my local and state governments affect me? What are my rights and responsibilities as a citizen in Kentucky?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand the basic purposes of government in Kentucky including the establishment and maintenance of order, the protection of rights of individuals, and the promotion of the common good. • recognize the three levels of government. • identify the branches of government at each level and recognize the offices associated with the branches. • understand that individuals have rights and responsibilities that change when people assume different roles in different groups. • recognize that, in a democratic society, individuals need to participate in government and civic affairs.

Grade 4 Social Studies

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • conduct surveys (e.g., e-mail, oral interview, regular mail) of community members or pen pals to determine what people think the purpose of government should be. Analyze findings and present to local government officials. • create bulletin boards, posters, or charts with the three levels of government (local, state, national) and list functions of each (e.g., create laws, maintain order, collect taxes). Discuss what would happen if functions and duties were drastically altered (e.g., only local government could create laws; the national government had no money for maintenance or construction of Interstate Highway Systems). Present findings to class. • examine branches of government (legislative, judicial, executive) and the offices associated with them (e.g., president, mayor, governor). Write job descriptions for the various offices and compare. • create mini-dramas about an average fourth grader and their rights and responsibilities in different roles and in different groups (e.g., son or daughter in a family; president of 4-H Club; class secretary; member of the soccer team). Relate rights and responsibilities to those of a citizen in a democracy. Write editorials for class or school newspaper about responsibilities of citizenship than students should assume (<i>WP-Transactive</i>). • create posters using the slogan “Uncle Sam NEEDS You.” Include information on why it’s important for individuals to participate in government and civic affairs. • create a personal “Bill of Rights and Responsibilities” as citizens of Kentucky. Present bills to class and then create a similar document for the entire class. Share final bill with local lawyers, government officials, and/or high school government classes. Ask audiences to critique bills. 	<p>Connie is paired with a peer for classroom activities and works with a classroom instructional assistant. She develops her editorials working with the teacher and assistant. With assistance, he uses Alpha-Keys keyboard and a specialized word processing software to further develop and publish his editorials (<i>Types of extensions: procedures and routines, resources and materials, level of support, participation</i>).</p> <p>Brenda, Chad, and Matt use limited planning strategies for developing ideas and organizing thoughts for writing. They use storyboards to conceptualize and organize information and to provide a visual picture of their thoughts (<i>Types of extensions: procedures and routines, order of learning, resources and materials</i>).</p>

Grade 4 Social Studies

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Culture and Society (2.16 2.17)</p>	<p>How did culture and social institutions impact the development of Kentucky and regions of the United States?</p> <p>What is the culture of Kentucky? Does that describe my own personal culture?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand similarities and differences in the ways groups and cultures within Kentucky and regions of the United States address similar needs and concerns. • recognize the elements of culture using different groups from Kentucky's past and regions of the United States as examples. • understand how social institutions in Kentucky's past and regions of the United States respond to human needs, structure society, and influence behavior. • recognize how tensions and conflict can develop between and among individuals, groups, and institutions. • analyze strategies and ways to achieve conflict resolution.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • research different cultures in Kentucky and regions of the United States to understand how they address similar needs and concerns. Create illustrated books demonstrating how different cultures address needs and concerns. • research elements of culture (e.g., food, art, music, dress) to determine their significance to different cultures in Kentucky and regions of the United States. Create bulletin boards, posters, or multimedia presentations to present findings. • research specific social institutions (e.g., government, economy, education, religion, family) to understand how institutions have responded to human needs. Create a top-ten list of the ways that social institutions make life better or help people. • create a top-ten list of the reasons why conflict can occur among individuals and groups. Create another top-ten list of the best ways to resolve conflict. Create multimedia presentations for other classes or schools. • develop personal profiles focusing on culture. Include information on the culture of Kentucky and personal culture. Create multimedia presentations for classmates 	<p>Tina participated in services for intellectually gifted students at her former school. Her father has been transferred many times in the last few years. As a result, Tina has had many experiences with different cultures. Allow Tina to act as a consultant for other groups. In addition, ask Tina to create a multimedia presentation her class showing similarities and differences among the cultures she has experienced (<i>Types of extensions: motivation, participation, purpose and appropriateness</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Economics (2.18)</p>	<p>How did economic issues impact the development of Kentucky and regions of the United States?</p> <p>What is my own economic system? How do I get/earn money and how do I spend it? How do I make decision on what to buy? How does living in Kentucky affect my economic decisions?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand the basic economic problem of scarcity (imbalance between unlimited wants and limited resources) and recognize how people have addressed the problem through decision making. • understand that producers create goods and services and consumers make economic decisions and choices. • understand economic concepts and use them appropriately in context to explain conditions or events in Kentucky history and regions of the United States. • recognize that economic systems are created to deal with the problem of scarcity.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create posters illustrating scarcity (e.g., money, clothes, space, time) in their lives. Explain in journals how these problems were solved using appropriate decision-making skills. • create posters or bulletin boards using magazine pictures to illustrate differences between goods and services. Conduct surveys concerning products for which there are many available substitutes (e.g., different kinds of toothpaste, different kinds of soft drinks, different kinds of tennis shoes). Design surveys with four to six questions concerning choice of brand names (e.g., Which tennis shoe is most comfortable?, Which tennis shoe costs the most?, Which tennis shoe is the best looking?). Design consumer guides for students to use when selecting products. <i>Use this activity to develop possible writing portfolio entries (WP-Transactive).</i> <p>Technology suggestion: <i>Use desktop publishing to create consumer guides.</i></p> <ul style="list-style-type: none"> • conduct a pizza market survey (e.g., How much would students be willing to pay per slice?; How many slices would a store be willing to provide at different prices?). Write letters to managers of pizza parlors explaining results of survey and suggesting changes to menus or prices (WP-Transactive). • divide into groups and create products from provided resources (e.g., newspapers, scissors, markers, staplers, rulers). Create an economic system (a way people decide to organize production and consumption) by design what to produce, how to produce it, and who will receive finished products. Describe scarcity problems encountered and how these problems were solved. • conduct market surveys of peers to determine wants, needs, and resources that will be used to meet their needs and wants. Determine how living in Kentucky or living in different regions of Kentucky affects survey findings. Write a summary of research and create graphs to communicate findings. Publish in school paper (WP-Transactive). 	<p>Danielle, with assistance from a peer, finds photographs and illustrations representing the concept of scarcity for her poster. She illustrates in her picture journal how she would solve these problems in her daily life (<i>Types of extensions: resources and materials, level of support, complexity</i>).</p> <p>Clayton organizes and translates his thoughts in writing similar to same age peers. He needs support for staying on task, assignment completion. Prior to create products from provided resources, Clayton develops a chart with his teacher for taking data on staying on task and assignment completion and teaches other students who need assistance with these areas. With assistance he develops a problem solving routine to use in group situations. He trains his teachers on how to collect data. His data collection device replaces the current one that teachers are using to collect ongoing progress data (<i>Types of extensions: purpose and appropriateness, application and demonstration of knowledge, level of support, motivation</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Geography (2.19)</p>	<p>What impact did geography play in the development of Kentucky and regions of the United States?</p> <p>Where do I live in Kentucky? How did I get here? How does the geography of where I live affect the things I do and the way I am?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand that all places on Earth have an absolute and relative location. • recognize the five themes of geography (location, place, regions, movement, and relationships within places) and use them to analyze geographic issues and problems in Kentucky and regions of the United States. • use various representations of the Earth to find and explain human and physical geographic features in Kentucky and regions of the United States. • understand how humans have interacted with the physical environment to meet their needs in Kentucky and regions in the United States. • recognize how the physical environment, especially in the past, limited and promoted human settlement and activities in Kentucky. • use a variety of tools to obtain and present geographic information about the United States and its close neighbors (i.e., Canada, Mexico). • develop mental maps of the United States and its regions. • recognize unique places in regions of the United States.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create historical and thematic maps of Kentucky (e.g., landform, population, natural resources, crop production) to show locations of various activities and occurrences over time. • write directions on how a student could visualize different mental maps (e.g., “Pretend you’re floating over your neighborhood and can see all the houses and streets”; “Pretend your house has no roof and you’re a bird looking down and seeing all the rooms and hallways”). Apply this technique to create a mental map of Kentucky and regions the United States. Discuss how mental maps can be helpful. • use written and visual information to create a list of the most unique places in Kentucky. Categorize the places into those with physical characteristics (e.g., Cumberland Falls, Natural Bridge) and those with human-made characteristics (e.g., state universities, Jefferson Davis Monument, Louisville Zoo). Create travel brochures of unique places with some brochures focusing on physical characteristics and others focusing on human-made characteristics. <p><i>Technology suggestion: Use desktop publishing and draw programs to create brochures.</i></p> <ul style="list-style-type: none"> • create illustrated time lines of the history of Kentucky. Highlight specific geographic conditions, events, and occurrences that had significant impact on the development of Kentucky. • create population maps of Kentucky for the years 1792, 1850, 1930, and 1998. Present maps to the class with an explanation of why and how the population changed or shifted over time. • examine written and visual information to understand how technology has been used to modify the environment of Kentucky over time (e.g., dams, road systems, agricultural machines, buildings, settlements). Give oral presentations on the benefits of the modifications but also address negative consequences. • develop a study to evaluate the effects of geography on their lives. Collect information on where they live and the reasons they live where they do. Investigate the effects of geography on weather and research the natural resources found in their region. Answer the question, “How does the geography of where I live affect the things I do and the way I am?” Create posters illustrating their findings. 	<p>Mallory is a skilled artist. She has won awards in her age group at community art shows and helps her mother after school in her gallery. She will conduct a tour of her mother’s gallery for her classmates explaining aspects of composition use of color, etc. of the gallery display (<i>Types of extensions: demonstration of knowledge, motivation, participation, magnitude</i>).</p>

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Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Historical Perspective (2.20)</p>	<p>How did Kentucky get to be the way it is today?</p> <p>Do I have family/ancestors who lived in Kentucky? Who were they? Where did they live and what did they do for a living? How has that influenced who I am?</p>	<p>Students will</p> <ul style="list-style-type: none"> • develop a chronological understanding of Kentucky's early development as a territory and state. • explore different perspectives and interpretations of Kentucky history by using primary and secondary sources, artifacts, and time lines. • examine cause-and-effect relationships for events in Kentucky history and understand that some events had multiple causes. • understand different groups throughout Kentucky's history and their reasons for exploring and/or settling in Kentucky. • recognize how life-styles and conditions have changed over time in Kentucky. • understand that specific symbols, slogans, buildings, and monuments represent ideas and events in Kentucky's history.

Grade 4 Social Studies

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create illustrated time lines of Kentucky’s early development as a territory and state. Focus on major events (e.g., early exploration, settlement, statehood) and important people (e.g., Daniel Boone, Simon Kenton, Christopher Gist, John Filson, Dr. Thomas Walker). • use primary and secondary sources (e.g., diaries, journals, illustrations, visual and written material) to examine different perspectives and interpretations of Kentucky history (e.g., Native Americans and settlers; settlement from a man’s perspective versus a woman’s perspective; Civil War period from slave and slave owner perspective). Role-play different perspectives of different events and time periods. • create a “domino-effect” game where the dominos are labeled as certain events, people, or occurrences from Kentucky’s history. Place the dominos in the correct order to show cause-and-effect relationships. • create posters with visual and written information on different people and groups and their reasons for exploring and/or settling in Kentucky. Focus on different time periods to illustrate reasons why people came and continue to come to Kentucky. • choose different periods in Kentucky history and investigate lifestyles and conditions of the time. Write articles for a magazine titled “The Good Life in Kentucky.” Describe and illustrate the most desirable life-styles and living conditions of specific periods (<i>WP-Transactive</i>). • analyze Kentucky’s symbols and slogans to determine their significance. Create a new state seal, flag, and state song to represent current conditions. Share with other classes. • create thematic maps of Kentucky (e.g., population) showing where ancestors live or lived. Create additional maps showing common occupations of people who lived in Kentucky, including ancestors and relatives. Analyze maps and write personal essays explaining how population and occupation patterns affected them. 	<p>Shane is highly motivated and social. He needs enlarged materials to read and discriminate details. He can access regular print through low vision devices such as CCN or hand-held magnification for short periods of time. Shane needs additional time to complete tasks. Allow Shane to construct time line using raised lines for tactile exploration and development. He works with a sighted partner to place information on time lines (<i>Types of extensions: complexity, resources and materials</i>).</p>

Grade 5

Model II: A Thematic Approach

In Model II, both years of intermediate social studies are organized around two guiding questions that students should be able to answer at the successful completion of each course. In grade five, these questions culminate the students' study of the United States. The questions assist students in recognizing the importance of history in determining who we are, why we are in the United States, and what our future may be. Prior to answering these questions,, students answer a number of essential questions. These essential questions prepare students to answer the final two guiding questions.

Models are organized around the essential and guiding questions. The essential questions direct teachers' choices of activities, and are the questions students should be able to answer as they study the different social studies' strands (i.e., government and civics, culture and society, economics, geography, historical perspective) included in this course.

Pages of models are arranged in pairs. On the left-hand page of each pair are guiding and essential questions along with related academic expectations and correlations to the *Program of Studies*. Sample activities and sample extensions for diverse learners are found on the right-hand page. While sample activities address *Program of Studies* content, they are not intended to be comprehensive. Teachers still are responsible for planning instruction to meet the diverse needs of all their students.

Guiding and Essential Questions:

Why is it important to study the history of the United States?

What have I learned about myself from my study of the United States?

- What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?
- As a citizen living in the United States, how does the national government affect me? What are my rights and responsibilities as a citizen of the United States?
- How did culture and social institutions impact the development of the United States?
- What is the culture of the United States? Does that describe my own personal culture?
- How did economic issues impact the development of the United States?
- What is my own economic system? How do I earn money and how do I spend it? How do I make decisions on what to buy? How does living in the United States affect my economic decisions?
- What impact did geography play in the development of the United States?
- Where do I live in the United States? How did I get here? How does the geography of where I live affect the things I do and the way I am?

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Model II: A Thematic Approach

- Why is the United States the way it is?
- Do I have family/ancestors who lived in other parts of the United States? Who were they? Where did they live and what did they do for a living? How has that influenced who I am?

Grade 5 Social Studies

Academic Expectations	Guiding Questions	Correlations to Program of Studies
<p style="text-align: center;">Government and Civics (2.14, 2.15)</p>	<p>What are the basic purposes of government and how do they apply to the rights and responsibilities of individuals?</p> <p>As a citizen living in the United States, how does the national government affect me? What are my rights and responsibilities as a citizen of the United States?</p>	<p>Students will</p> <ul style="list-style-type: none"> • recognize the basic purpose of democratic governments including the establishment of order, security, and the attainment of common goals. • understand that the Constitution of the United States establishes a government in which powers are shared among different levels and branches. • understand that, in a democratic society, citizens have rights and responsibilities. • explore the rights and responsibilities of citizens in real-life situations.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • assume role of presidential candidates and give detailed speeches on the basic purpose of a democratic government. Address issues such as the establishment of order, security, and working toward common goals. Choose the best ideas from all speeches and place on posters titled, “Purpose of Government.” • apply principle of “checks and balances” to a family or schools. Create charts that show who holds the power (more than one person will have some type of power). Show how the different people with power are “checked and balanced” by others. Compare to the “checks and balances” in the federal government. • participate in discussions concerning the rights and responsibilities of citizens. Conduct mock school meetings regarding the creation of rules for their playground. Take turns speaking before the group and presenting suggestions. List responsibilities that accompany the right to speak publicly (e.g., the way you speak, what you say, listening to other people’s opinions). Discuss what might happen to free speech if no one chose to participate in public meetings. • discuss beliefs people have about basic rights/natural rights (e.g., the right to life, liberty, and property). List the rights they think they should have in a school setting (e.g., classroom, cafeteria, hallway, playground) and explain why it is important to have these rights. Compile top ten choices for the most important choices. Conduct school surveys using top ten choices and chart the results to see if other students agree. Present results to the principal, PTA or student council. Write editorials for school newspaper about a specific “top ten” right and the responsibilities involved with it (<i>WP-Transactive</i>). • create a personal “Bill of Rights and Responsibilities” as a citizen of the United States. Present bills to class and then create a similar document for the entire class. Share final bill with local lawyers, government officials, and/or high school government classes. Ask audiences to critique bills. 	<p>April has tested significantly higher than her peers on a pretest of U.S. history topics. Allow April to read memoirs, journals, or diaries of historic figures to create speeches on the purposes of government (<i>Types of extensions: pace, order of learning</i>).</p>

Grade 5 Social Studies

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Culture and Society (2.16 2.17)</p>	<p>How did culture and social institutions impact the development of the United States?</p> <p>What is the culture of the United States? Does that describe my own personal culture? What is the best way for me to get along with other people around me?</p>	<p>Students will</p> <ul style="list-style-type: none"> • understand how culture in the United States has been influenced by languages, literature, arts, beliefs, and behaviors of diverse groups. • recognize social institutions and their impact in the history of the United States. • examine social interactions among diverse groups in the history of the United States.

Grade 5 Social Studies

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • role-play the U.S. Cabinet Secretary of Culture and describe ways the culture of the U.S. has been influenced by language, literature, arts, beliefs, and behaviors of diverse groups. Include descriptions in a report to be delivered to the President. • assume the identity of a social institution. Research that particular social institution and its impact on U.S. history. Give oral presentations concerning the significant contributions of that institution. As a class, vote on the social institution that has had the greatest impact overall. • research different social interactions occurring among different groups in U.S. history. Create bulletin boards, posters, or charts representing different interactions that have taken place in U.S. history. • develop personal profiles focusing on culture. Include information on the culture of the United States and personal culture. Create multimedia presentations for classmates 	<p>The advanced cluster group of history students are allowed to choose their own learning paths for many U.S. history concepts. Ethan, Sara, and Diane are mentored by historians at the university, while Tori and Brian are involved in a community problem solving competition project (<i>Types of extensions: environment, motivation, participation</i>).</p>

Grade 5 Social Studies

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Economics (2.18)</p>	<p>How did economic issues impact the development of the United States?</p> <p>What is my own economic system?</p> <p>How do I earn money and how do I spend it? How do I make decision on what to buy? How does living in the United States affect my economic decisions?</p>	<p>Students will</p> <ul style="list-style-type: none"> • recognize the impact of economic factors (e.g., security, growth, desire for profits) on decisions made by individuals, businesses, and governments in the United States. • examine basic components (e.g., taxes, goods and services provided by government) of the economic system of the United States. • trace changes over time in the economic system of the United States, including changes in the goods and services produced by United States workers and the impact of specialization.

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Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> work in groups to discuss the impact of economic factors (e.g., security, growth, desire for profits) on decisions made by individuals, businesses, and governments in the U.S. Discuss the Boston Tea Party as an example of an economic conflict. Write editorials reflecting different perspectives of the Boston Tea Party. role-play different sides of the “Give me more government” vs “Give me less government” argument. Focus on economic involvement of government, including taxes and government-provided goods and services. Debate the question, “Do we get what we pay for?” create mini-dramas, from three different time periods (e.g., 1800, 1900, 1998), of a family discussing the questions “What do I need to live, and where will I get it?” Address basic issues of food, shelter, and entertainment. Show change over time in regard to more self-sufficiency (e.g., in 1800 most goods and services came from local sources) and current conditions (e.g., we now have many imported goods). conduct market surveys of peers to determine wants, needs, and resources that will be used to meet their needs and wants. Determine how living in the United States or living in different regions of the United States affects survey findings. Write a summary of research and create graphs to communicate findings. Publish in school paper (<i>WP-Transactive</i>). 	<p>Keene and Kate are strong readers with creative ideas. They use expressive verbal skills and are thinking about acting as a possible career. Keene has rheumatoid arthritis which significantly impacts his ability to participate in sustained writing or activities using his hands. Kate is a quadriplegic due to a driving accident. Keene and Kate work with an assistant, multimedia technology and peers to create their mini-dramas. The assistant provides physical support. On days when Keene’s arthritis is under control, he works independently without support (<i>Types of extensions: level of support, procedures and routines, time, resources and materials</i>).</p>

Grade 5 Social Studies

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Geography (2.19)</p>	<p>What impact did geography play in the development of the United States?</p> <p>Where do I live in the United States? How did I get here? How does the geography of where I live affect the things I do and the way I am?</p>	<p>Students will</p> <ul style="list-style-type: none"> • use a variety of tools to obtain and present geographic information (e.g., landforms, natural resources, natural disasters) about the United States and its close neighbors (i.e., Canada, Mexico). • develop mental maps of the United States. • recognize unique places in the United States. • examine how the history of the United States was influenced by its physical environment. • understand human settlement patterns in the United States and how they were related to the physical environment. • understand how the people of the United States have used technology to modify the environment to meet their needs.

Grade 5 Social Studies

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • create historical and thematic maps (e.g., landform, population, natural resources, crop production) to show locations of various activities and occurrences over time in the United States. • write directions on how a student could visualize different mental maps (e.g., “Pretend you’re floating over your neighborhood and can see all the houses and streets”; “Pretend your house has no roof and you’re a bird looking down and seeing all the rooms and hallways”). Apply this technique to creating a mental map of the United States. Discuss how mental maps can be helpful. • use written and visual information to create a list of the most unique places in the United States. Categorize the places into those with physical characteristics (e.g., Grand Canyon, Pikes Peak, Natural Bridge) and those with human characteristics (Mount Rushmore, Washington D.C., Times Square). Create travel brochures to places with some brochures focusing on physical characteristics and other brochures focusing on human characteristics. • create an illustrated time line of the history of the United States. Highlight specific geographic conditions, events, and occurrences that had significant impact on the development of the United States. • create population maps of the United States for the years 1776, 1840, 1900, 1930, and 1998. Present maps to the class with an explanation of why the population changed over time. • develop a study to evaluate the effects of geography on their lives. Collect information on where they live and the reasons they live where they do. Investigate the effects of geography on weather and research the natural resources found in their region. Answer the question, “How does the geography of where I live affect the things I do and the way I am?” Create posters illustrating their findings. 	<p>Jarrold has strong verbal skills and reading skills. Allow him to create a population map with large markers or cardboard shapes to accommodate his poor fine motor skills. Jarrold will need more time than other students to finish his map (<i>Types of extensions: resources and materials, complexity, time</i>).</p>

Grade 5 Social Studies

Academic Expectations	Guiding Questions	Correlations to the Program of Studies
<p style="text-align: center;">Historical Perspective (2.20)</p>	<p>Why is the United States the way it is?</p> <p>Do I have family/ancestors who lived in other parts of the United States? Who were they? Where did they live and what did they do for a living? How has that influenced who I am?</p>	<p>Students will</p> <ul style="list-style-type: none"> • explore the interpretive nature (how perceptions of people and passing of time influence accounts of historical events) of the history of the United States using a variety of tools (e.g., primary and secondary sources, data, artifacts). • develop a chronological understanding of the history of the United States and recognize cause-and-effect relationships and multiple causation. • recognize broad historical periods and eras of the history of the United States (i.e., Land and People before Columbus, Age of Exploration, Colonization, War for Independence, Young Republic, Westward Expansion, Industrialism, Twentieth Century). • trace change over time in the history of the United States and identify reasons for change. • examine the historical contributions of individuals and groups. • recognize the significance of important symbols, monuments, patriotic songs, poems, and written passages in the history of the United States. • recognize basic similarities and differences in the United States, Canada, and Mexico.

Grade 5 Social Studies

Sample Activities	Sample Extensions for Diverse Learners
<p>Students will</p> <ul style="list-style-type: none"> • use primary and secondary sources to examine different interpretations of historical events in the United States. Work in groups and select different sources to study. Compare different perspectives. Write news articles illustrating comparisons. • create a “domino model” that demonstrates cause-and-effect relationships. After selecting an event from U.S. history, label the dominoes with appropriate headings and demonstrate cause-and-effect relationships. • review written and visual materials of historical periods and eras of United States history. Create time lines, posters, and bulletin boards that illustrate each period or era. • review resource materials on the Industrial Revolution. Debate the following statement, “The Industrial Revolution was good for the United States” • use resource materials to gather significant information regarding the life of Thomas Jefferson. Create a time line outlining important dates in his life. Create Jefferson silhouettes including important contributions he has made to the United States. Participate in trivia contests to reinforce these contributions. Write letters thanking him for his contributions. • analyze the historical significance of the poem/song the “Star Spangled Banner” and discuss reasons it became our national anthem. Write editorials with reasons for changing the anthem. • gather information on the physical and cultural characteristics of the countries of North America. Share lists of common characteristics of each country. Choose one characteristic from list to illustrate on class bulletin boards. • create thematic maps of the United States (e.g., population) showing where ancestors live or lived. Create additional maps showing common occupations of people who lived in Kentucky, including ancestors and relatives. Analyze maps and write personal essays explaining how population and occupation patterns affected them. 	<p>Andrea has good verbal and listening skills but has difficulty with organizing ideas and thoughts and staying on task. Her teacher posts assignments and rules around the classroom that help keep Andrea focused on her work. Andrea also uses advance and post-organizers to complete tasks. Andrea’s teacher provides her with note cards containing directions and steps to analyze the “Star Spangled Banner” (<i>Types of extensions: resources and materials, procedures and routines, environment</i>).</p>